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**Special needs school teacher's beliefs about inclusion
and what teaching styles and strategies best facilitate
the inclusion of children with special educational needs
in PE lessons?**

**Dissertation submitted under the discipline of
Pedagogy**

Thomas Turrell

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**Special needs school teacher's beliefs about inclusion
and what teaching styles and strategies best facilitate
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in PE lessons?**

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Table of Abbreviations

Abbreviation	Definition
Physical Education	Physical Education
NCPE	National Curriculum for Physical Education
ASD	Autistic Syndrome Disorder
PMLD	Profound Multiple Learning Disabilities
SLD	Severe Learning Disabilities

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Abstract

Jing and Ha (2012) performed a review of physical education inclusion literature from the past 20 years. Although they believed many studies have been beneficial to the research area they argued that, a potential limitation within the literature was the lack of stakeholder (e.g., parents or teachers) perspective research from different social and cultural perspectives. The present study conducted one on one interviews with five different special needs school teachers. This enabled the researcher to examine inclusion from a different social experience of PE from within special needs schools. **Aims:** the aims of the present study, firstly, were to question participant's beliefs regarding the importance of including children with special educational needs in physical education, and question what they believe the benefits are for them taking part. This aimed to assess whether the benefits of PE may differ for special needs children when compared to mainstream students. Secondly, the research aimed to find, what teaching styles and strategies those teachers believe enabled them to allow their students to participate in PE. This research aimed to provide a resource that potential special needs school teachers could use to find practical examples of the teaching strategies used by qualified, experienced teachers. **Results:** results indicated that there are many benefits for special needs children taking part in PE, these included, enjoyment, development of gross and fine motor skills, communication skills and more. Other results found that there may be benefits of PE that may not be considered in a main stream school environment such as, physio therapy. Other results illustrated, that when considering teaching styles and strategies, there is a need for special needs teachers to really consider the teaching styles they use when working in different classes, as different students with different needs may respond/benefit more from different teaching styles. **Conclusion:** Consequently, findings support Armstrong's (2005) suggestion that, inclusion for pupils with special educational needs should be recognised as a process that is responsive and flexible to pupil needs, and furthermore should move beyond traditional concepts of integration into mainstream PE methods.

Chapter 1

Introduction

1.1 Introduction

The Government Policy for inclusion in education is driven by the *Every Child Matters* agenda, it emphasises school's responsibilities in including children with a diversity of additional needs (Evans, 2007). It aimed to reduce educational failure and maximise potential for all children. Inclusion is believed to greatly contribute children's holistic development and helps remove barriers to achievement (Every Child Matters agenda, 2003). The Department for Education and Skills (DfES, Removing Barriers to Achievement, 2004) states, inclusion is about the quality of children's experiences; how they are helped to learn, achieve, and participate fully in the life of the school. A large part of the inclusion agenda revolves around provision of children with special educational needs and disability (SEND). The Code of Practice for Special Educational Needs (2002) identifies four main areas of special educational needs:

- Cognition and learning needs;
- Behaviour, emotional and social development needs;
- Communication and interaction needs;
- Sensory and/or physical needs.

The Disability Discrimination act (2006) argues when considering children with SEND in schools, that school's need to respond to the challenges/barriers to inclusion by making reasonable adjustments. The importance of including children with special educational needs in all aspects of education is highlighted by Evans (2007), who argued that when deciding if reasonable adjustments are necessary teachers should think about the disadvantages of not including pupils with SEND demonstrated in Table 1. Pupils being disadvantaged in terms of:

Table 4. Disadvantages of not including SEND children.

1	Time, effort and inconvenience needed to achieve something that may be instant and easy for others.
2	Indignity or discomfort incurred by not having proper facilities/equipment.
3	Loss of opportunity, academically and socially.

4	Diminished progress in life skills, curriculum knowledge and understanding, and cognitive functioning.
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Including children in all aspects of school life therefore is vital to both their physical and mental well-being, so teachers should ensure all students are able to participate to the best of their ability. This highlights the pertinence of the current study, within the UK the commitment to inclusive pedagogies for pupils with SEND is well evidenced and so teachers must and should embrace these practices through the delivery of effective lessons and assessment strategies. By researching Inclusion and strategies for inclusion therefore, this study aimed to help provide a resource that special needs teachers may choose to use. By considering both practical examples of teaching strategies for the inclusion of SEND in Physical Education (PE) and furthermore the beliefs of special needs school teachers of the benefits of including SEND children in PE.

The Qualification and Curriculum Authority (QCA, 2007) define PE as a subject which; develops pupils' competence and confidence to take part in a range of physical activities, and becomes a central part of their lives, both in and out of school. Jing and Ha (2012) argued in a review of PE inclusion literature from the last 20 years, that although findings from these studies are beneficial to the research area, a potential limitation was the lack of stakeholder (e.g., parents or teachers) perspective research in regards to inclusion from different social and cultural perspectives of PE. This highlights a gap in research that the present study aimed to help fill. By studying the beliefs about inclusion and strategies for inclusion from the perception of special needs school teachers; this study provides an examination of inclusion from a different social experience of PE. This aimed to help strengthen the wealth and depth of inclusion literature in general, and in particular, aimed to increase the amount of support for teachers working specifically with SEND children; perhaps an area that requires more research and guidance.

The primary aims of the present study therefore were twofold; to question special needs school teachers about their beliefs regarding the importance and benefits of inclusion for SEND children in PE. This aimed to assess whether the benefits of PE may differ for Special needs children when compared to mainstream students, and if so whether the aims of PE for SEND should therefore also differ

from mainstream schools. Secondly, research aimed to question teachers about what teaching styles and strategies they use to enable them to include their students in PE. This aimed to provide a resource that potential special needs school teachers could use to find practical examples of the teaching strategies used by qualified, experienced teachers.

Chapter 2

Literature Review

2.0 Literature Review

This chapter aimed to provide an insight into key themes relevant to the aims and objectives of the study. By using appropriate research, definitions are provided as well as findings from previous research to help gain a greater understanding about the key themes. Literature is also used to highlight the gaps in research that the present study aimed to fill and explain what research informed the present study. In order to evaluate literature concerned with inclusion and PE sections within this chapter include, physical education and the national curriculum, special educational needs and disability, and inclusion. In order to increase the readers understanding of teaching strategies this chapter also includes sections concerned with teaching styles/strategies and teaching strategies for inclusion on SEND. Within the literature review themes are used as sub headings to provide a clearer structure sign posting sections of literature. This sort to provide a clear indication of what research has informed the present study.

2.1 Physical Education and the National Curriculum

When performing a study concerned with Physical Education (PE) it is important to understand what PE is and what its aims and objectives are. Whitehead (2000) argues PE is not merely a subject where physical activity is the only objective for teachers to consider, but rather a subject the entails many other means of educating children. The Qualification and Curriculum Authority (QCA, 2007) define PE as a subject which; develops pupils' competence and confidence to take part in a range of physical activities, and becomes a central part of their lives, both in and out of school. However this definition of PE does not describe how PE might differ in different environments, for example is PE different for children in primary, secondary and special needs schools? PE aims to promote, health, vocational preparation, appreciation for sporting culture and tradition, cognitive development and artistic awareness (whitehead, 2000). Due to these suggested aims the researcher decided to ask participants what they believe the benefits of taking part in PE are for those with special educational needs and disabilities. This aimed to question whether the aims of PE should be different for SEND children based on the benefits they receive when taking part.

Physical education is a core subject of the National Curriculum (NC, 2008). The aim of the National Curriculum for PE (NCPE) is to provide a meaningful, relevant and motivating curriculum for all learners. The government recommends that all children take part in one hour of physical activity a day; a limitation to this suggestion however is whether this amount should differ for children in special needs schools as many children have different needs and capabilities. Linked to the current study, considering children with special needs and disabilities, the government's strategy for the inclusion of students with SEND states that all children have the right to a good education and the opportunity to fulfil their potential, and that all teachers should expect to teach children with SEND (DfES, 2004). The NCPE (2008) further states that for learners with disabilities in particular teachers should:

- improve access to the curriculum
- make physical improvements to increase participation in education
- provide information in appropriate formats.

Furthermore In doing so schools should seek advice regarding reasonable adjustments, alternative/adapted activities and appropriate equipment and resources, which may be used to support the full participation of all learners. Suggestions however fail to provide practical examples of how teachers can make these adaptations, but rather just suggest what teachers should try to do. The current study therefore questioned special needs school teachers about some of the adjustment strategies they use to enable students to participate in PE, this aimed to provide practical examples to help potential SEND teachers.

2.2 Special Educational Needs and Disability (SEND)

When performing a study concerning children with special needs it is important to have an understanding of what it means in an education setting. Special educational needs and disability refers to students, around one in five children, who have a learning difficulty that requires specific action by the school and encompasses a diverse range of social, emotional, behavioural, cognitive, learning and physical needs (Vickerman, 2007). Due to the nature of working with children with SEND therefore teachers come across many barriers to participation. Pivik,

Mccomas and Laflamme (2002) performed a study that is particularly pertinent to the present study as it aimed to question what barriers teachers come across in including children with SEND in PE. Results indicated four categories of barriers to participation were apparent: (a) the physical environment (e.g., narrow doorways, ramps); (b) intentional attitude barriers (e.g., isolation, bullying); (c) unintentional attitudinal barriers (e.g., lack of knowledge, understanding and awareness); and (d) physical limitations (e.g., difficulty with manual dexterity). Pivik *et al* (2002) therefore argued that for teachers to overcome these barriers they need to ensure they have the knowledge and skills to adapt their teaching to include all children, and that they also need to have a willingness to learn about the experiences of children with disabilities.

However Pivik *et al* (2002) highlighted a gap in their research which this study aims to help fill. They explained how similar research needs to examine the barriers to participation for students with a wider range of disabilities. The present study therefore was able to examine how these barriers may differ for teachers working in special needs schools, and due to the nature of special needs schools, provide examples from a range of children with different disabilities. Consequently In order to do address this, during the interviews teachers were asked to list what barriers they come across when trying to include their students in PE.

2.3.1 Inclusion

According to Hayes and Stidder (2013) the term inclusion refers to ways in which schools and teachers value the achievements, attitudes and well-being of every young person equally whilst providing a curriculum that is relevant to each individual regardless of ability (p. 9-10). Gough (1999) discusses the importance of inclusive practice and the significance of a sense of encouragement and equality of pupils in different teaching environments. Demonstrating how teachers should be encouraged to give all pupils with different abilities the same opportunities to work towards helping students gain a sense of achievement and success. Jing and Ha (2012) argue in a review of PE inclusion literature that 3 main research areas were apparent, stakeholder (e.g., teachers and parents) perspectives of inclusion in PE, effective inclusive practices and the impact of inclusion on students, with and without disabilities. Although Jing and Ha (2012) provide a platform for reviewing inclusion

literature, inclusion is large construct and so a strong argument could be made that there are many more inclusion research areas, including perhaps inclusion research based specifically from special needs school environments.

2.3.2 Student Perspective of Inclusion

Atkinson and Black's (2006) study is an example of literature concerned with students perspectives of inclusion. The study included 230 young secondary school students aged 11-16. The results found that 53% of pupils felt that PE could be better if staff received more advice on how to adapt activities. A strength of this study includes the age range used as it allows for information to be gained from students at different point in their educational experience. Due to this the present study also decided to interview teachers from different classes with different aged students, including primary, secondary and post 16. This aimed to help gain information not specific to working with a particular age group. A potential weakness of the study however is the lack of guidance on how to incorporate the advice into lessons and a lack of practical examples, including what teaching strategies may allow teachers to do so.

Another example of inclusion literature from student's perspectives can be found in Goodwin and Watkinson (2000) study, who examined the experiences of students with a range of physical disabilities in inclusive PE. Results indicated that students with physical disabilities were found to be most unhappy when they were subjected to social isolation, their competence was questioned, and/or participation was restricted. Findings highlight the importance of inclusion in PE and its effects on student's feelings of entitlement and competence. A weakness of this study however is the sample used; only participants with physical disabilities were examined excluding those with other disabilities, such as: profound to moderate learning difficulties, autism spectrum disorder and other disabilities. Due to the nature of special needs schools and the range of disabilities found within, this study was able to examine inclusion in an environment where a wide range of disabilities are found and so results are not specific to working with those who have physical disabilities. This aimed to aid the wealth and depth of inclusion literature.

2.3.3 Inclusion Strategies

Other studies have analysed specific inclusion strategies. Kodish, Kulinna, Martin, Pangrazi and Darst (2006) conducted a study concerned with testing effective inclusive practices, using a quantitative design they compared physical activity time and the number of steps walked by students during PE classes. Sample consisted of four groups, two inclusion classes and two non-inclusion classes all using electronic pedometers. Results illustrated that the inclusion of students with autism did not affect the physical activity of students without disabilities, supporting the use of inclusion strategies in PE. A potential limitation/weakness of the study conversely is whether or not steps taken are an accurate measure of the quality of PE experienced. The department for education and skills (2004) states, in a guide to recognising and achieving high quality PE and sport in schools and clubs, that when schools and sports clubs are providing high quality PE (HQPE) there are 10 characteristic that you should expect to witness in students as seen in table 2. Student who...

Table 5. 10 characteristics of High Quality PE

1	Are committed to PE and sport and make them a central part of their lives – both in and out of school.
2	Know and understand what they are trying to achieve and how to go about doing it
3	Understand that PE and sport are an important part of a healthy, active lifestyle.
4	Have the confidence to get involved in PE and sport.
5	Have the skills and control that they need to take part in PE and sport.
6	Willingly take part in a range of competitive, creative and challenge-type activities, both as individuals and as part of a team or group.
7	Think about what they are doing and make appropriate decisions for themselves.
8	Show a desire to improve and achieve in relation to their-own abilities.
9	Have the stamina, suppleness and strength to keep going.
10	Enjoy PE.

So when discussing Quality of PE it is important to recognise that the mere number of steps performed in a lesson is not an accurate measure of quality and

therefore a limiting factor to Kodish *et al's* (2006) study. Furthermore the characteristics of HQPE highlight the importance for all children to participate in PE including those with special educational needs and especially how PE and sports are an important part of a healthy, active lifestyle and help in increasing participant's sense of achievement. This however is not represented merely by steps made during a PE lesson.

2.3.4 Stakeholder's Perspective of Inclusion

The present study contained teacher's experiences of inclusion and therefore was concerned with the stakeholder's perspective of inclusion; specifically that of special needs school teachers. Previous research around stakeholder's perspective of inclusion includes Vickerman's (2007) study. The study aimed to explore the views and experiences of teacher trainers in their role of preparing secondary PE trainees for the inclusion of children with special educational needs. The study found that while inclusive PE was greatly supported, there was an inconsistency in the amount of time spent addressing this issue and the nature of curricular content. A strength of this study was how Vickerman (2007) consequently suggested that teacher trainers need to review their approaches in preparing PE teachers for their work in schools and working with children with special educational needs. This relates to the present study as it highlights the need for research to be conducted to evaluate what strategies qualified teacher use in PE. This information in turn may be able to help trainee teachers better prepare for working within special needs.

Other stakeholder studies have researched the attitudes of PE teachers towards inclusion in lessons. Rizzo and Vispoel (1991) designed a study to identify the variables associated with the teachers' positive and negative attitudes, more specifically the attitudes towards teaching students with mild disabilities in contrast to those with severe disabilities. Results found that teachers held more favourable attitudes toward teaching students with learning disabilities than teaching those with emotional and behavioural disorders (Rizzo and Vispoel, 1991). These results demonstrate the relevance of the present study, by discussing what teaching styles special needs teachers use to include students in special needs schools, findings may help indicate potential styles/strategy's that other teachers may be able to adopt to help them better cope with including students with a range of disabilities.

2.4.1 Teaching Styles/Strategies

The aim of teaching is to engage students in meaningful goal-orientated activity with the intent of meeting instructional objectives specific to a given lesson or set of lessons (Mosston and Ashworth, 2002; Rink, 2002). Mosston and Ashworth (2002) suggest that a given teaching style is distinguishable from another by, particular teacher actions and decisions, particular student actions and decisions, and the objective that the relationship satisfies. Teaching styles are also referred to in some literature as teaching strategies, (Metzler, 2000; Rink 2002) described as planned interactions between teachers and students resulting in specific outcomes. In early Physical Education programmes Dalen and Bennent (1971) suggest that teaching styles were commonly centred around the teacher, teachers were the decision makers, they selected and demonstrated the exercises, and they decided the fashion in which the lesson was implemented. Terms used to describe this type of teaching style include, direct, formal and teacher centred instruction (Metzler, 2000).

The Mosston and Ashworth (2000) spectrum is an example of a model with a range of teaching styles that can be used in teaching. The spectrum includes a productive and reproductive clusters of teaching styles, reproductive styles include teacher based decision making and productive style incorporate more student involvement in the learning process. The Mosston and Ashworth (1986) Spectrum demonstrated in the table 3, provides ten of the teaching styles described. The spectrum offers a range of teaching style options that can be adopted by teachers to accommodate students' diverse learning needs and allow for the lesson objectives to be met.

Table 3, Mosston and Ashworth (2000), Teaching style spectrum.

Style	Description
Style A – Command (cued response)	All decisions are made by the teacher
Style B – Practice	Students carry out teacher-prescribed tasks

Style C – Reciprocal	Students work In pairs: one performs, the other provides feedback
Style D – Self-check	Students access their own performance against criteria
Style E – Inclusion	Teacher planned. Students monitors own work
Style F – Guided Discovery	Students solve teacher set movements problems with assistance
Style G – Convergent Discovery (problem solving)	Students solve problems without assistance from the teacher
Style H – Divergent Production (discovery)	Teacher determines content. Student plans programme
Style I – Individual Programme	Student takes full responsibility for the learning process

Although the Mosston and Ashworth spectrum (2000) is widely recognised model amongst teaching styles research there are some limitations to the use of the model when trying to achieve desired outcomes. For example, in order to utilise the use of different teaching styles teachers must have the ability to effectively implement them, this can depend on the level of teacher, the quality of teacher and additionally the student perceptions of different styles (Pellett and Blakemore, 1997)

Research highlights the need for a range of teaching styles to be used to best improve learning (Mosston and Ashworth, 2002: Byra, 2006: Metzler, 2000). Byra (2006) argues that all students come from different cultural background, enter physical education with different amounts of movement experience and learn in different ways. This precipitates different learner needs and aspirations, which in turn precipitates the need for a variety of teaching styles. So research suggests that teaching styles and strategies are of great importance when aiming to facilitate learning. The present study therefore decided to ask participants whether or not they

consider what teaching styles/strategy's they use when teaching PE in special needs schools and if so what styles/strategies they use and why. This aimed to examine what teaching styles and strategy's they believe best enable them to allow all their students to participate.

2.4.2 Teaching styles/strategies for the inclusion of SEND

The present study however is more concerned with what styles/strategies best facilitate inclusion in PE, rather than the positive and negatives of different styles to learning. A Key area concerned with a wider perspective of inclusion in PE is the National Curriculum for Physical Education (NCPE). The NCPE offers three principles for creating an inclusive curriculum. It states that schools must set suitable learning challenges, respond to pupils' diverse learning needs and overcome potential barriers to learning (National Curriculum: Statutory Inclusion Statement, 2009). These principles are an example of a wider concept of how teachers can provide inclusion in PE. This can be related to inclusion in terms of gender, ability and cultural diversity.

This study however is more concerned with strategies for including students with Special Educational Needs and disabilities. Coates and Vikerman (2008) reviewed a range of strategies for differentiating PE for children with SEND and suggested there are three common themes that are evident in most models of inclusive delivery. These include; Curriculum adaption (changing what is taught); instructional modifications (changing how we teach); and human or people resources (looking at changing who teaches or supports adapted aspects of PE). Consequently, Armstrong (2005) argued inclusion for pupils with SEND should be recognised as a process that is responsive and flexible to pupil needs, and moves beyond traditional concepts of integration into mainstream PE methods. This relates to the present study, by questioning SEND teachers about the benefits of PE for SEND children this study can assess if the benefits for these children differ from mainstream PE.

Other research has been concerned with providing practical examples of teaching strategies that can be used to facilitate the learning of students with different disabilities and SEN within PE. Rouse (2009) proposes that an inclusive physical education setting can provide many positive benefits for students both with

and without disabilities. For students with disabilities, PE provides the opportunity to socialise with general peers and develop relationships, as well as develop fundamental motor skills (Rouse 2006, p3). Due to this Rouse (2006) created a resource that provided many practical examples of teaching strategies and activities for student involvement and furthermore offered the reader a clearer understanding of how to set realistic goals for those with different disabilities.

An example includes teaching strategies concerned with helping children with autism spectrum disorder. As the term “spectrum” implies, a wide range of cognitive, communication, and social abilities is represented in children with autism. The diagnosis ranges from autism with varying degrees of cognitive, social, and communication disabilities to asperger syndrome, in which the student has normal intelligence and language development but has deficiencies in social and pragmatic skills (Ervin, 2007). Some of these children do not speak; others have limited language skills; and others use repetitive phrases, yet most experts agree that it is the physical and emotional detachment from other people and the severe communication difficulties that are the hallmark symptoms of autism (Richard, 1997). Rouse (2006) therefore provided strategies for teachers to help overcome difficulties in participation. For example some students with autism have problems with pronoun reversals and often refer to themselves by their proper names rather than saying “me” or “I” (Richard, 1997). Given this Rouse (2006) found that students who showed this type of behaviour responded well to being referred to in the third person. For example “catch Joe” may become “Joe can catch”. By doing this Rouse has found teachers seemed to be able to immediately gain their attention. This may help in redirecting students to correct positions, explaining to students whose turn it is to perform a particular activity, and may also help in the general communication with the student. Due to this information the present also decided to question teachers about how they may adapt their use of language when teaching PE and how this may be able to help engagement in lessons.

Although Rouse (2006) provides a very useful tool to help enable teachers create inclusive environments suggestions are limited to working with children with specific disabilities however within classes in special needs schools a wide variety of students with different abilities can be found. This further highlights the relevance of the present study, by studying special needs school teacher’s beliefs concerned with teaching style/strategies used to best facilitate inclusion in PE lessons. Research

therefore aimed to provide a resource that teachers could use to help them understand some strategies that present school teachers feel work from their experience in including students with a variety of different abilities in PE.

2.5. Summary

The inclusion literature referenced in this chapter all highlight the importance of inclusion and how children have the right to access all aspects of school life (Atkinson and Black's, 2006; Goodwin and Watkinson, 2000; Mccomas and Laflamme, 2002; Rizzo and Vispoel, 1991; Vickerman, 2007). As a consequence, the present study questioned special needs school teacher's beliefs about inclusion; why they feel it is important, and what they think the benefits are for SEN children taking part in PE. This aimed to provide support for the use of inclusion strategies in PE and question whether the objectives of PE may differ for those children in special needs schools. Research suggests that through certain teacher actions and decisions the inclusion of all children can be achieved (Byra, 2006; Coates and Vikerman, 2008; Mosston and Ashworth, 2002; Rouse, 2009). However a lot of this research has been concerned with the integration of SEND students into a main stream school setting. By studying teachers from special needs schools therefore, this study provides an examination of inclusion and strategies for inclusion from a different social experience of PE from within special needs schools. Interviews therefore also aimed to question what teaching styles and strategies those teachers believe enable them to allow special needs school children to participate in PE.

Chapter 3

Methodology

3.0 Methodology

Through conducting interviews with a range of different special needs school teachers, this small scale research study aimed to discover special needs school teacher's beliefs about inclusion and what teaching styles and strategies best facilitate the inclusion of all students in their PE lessons. The following chapter will outline the methods used in order to address the aims of the research. For the purpose of clarity the following chapter has been divided into seven sections; the research design, sample, ethics, pilot study, procedure, data analysis and finally the trustworthiness of the research.

3.1 Design

Patton (2002) describes qualitative research as a process of inquiry, not manipulated by the researcher that seeks to understand phenomena in real-world settings. Armour and Macdonald (2012) argue that qualitative research is particularly useful when seeking to understand people's beliefs, values, feelings and motivations. Therefore qualitative research is a suitable approach for this study, being particularly useful for answering questions about the perspectives of a group under study. Patton (2002) identified three types of qualitative data collection; these include interviews, observations and documents. Patton (2002) however argued that the quality of the data collected is dependent on the individual researcher; the rigour of the observations, the way the questions are asked and the analysis of the data. The researcher therefore aimed to use their experience of undergraduate studies to influence the way in which they conducted the study, based on research and guidance received from experienced research supervisors. This study adopted the use of interviews in order to collect information. Kvale and Brinkmann (2009) suggest that through conversation, people reveal information about their experiences, feelings and attitudes towards a certain phenomenon. In an interview conversation the researcher therefore is able to ask questions and listen to the responses with the option of asking more questions at any given point to gain the required depth of information (Kvale and Brinkmann, 2009).

3.2 Sample

The sampling method used in this project was purposive sampling. This specific method was chosen as it allowed the researcher to access a particular subset of people or person (Gratton & Jones, 2004). This method allowed the researcher to start with a vision or and a purpose in mind which enabled the researcher to exclude those who were not suitable for the study (Sparkes and Smith, 2014). This sampling method was suitable for the present study due to that nature of small scale undergraduate research. Due to the limited resources and time available for undergraduate research, the researcher believed that a small scale research project does not allow for the in depth rigour of larger sample study, therefore it was not applicable to the present study. By using purposive sampling however the research was able to selected the sub-set of participants that were suitable to the study and therefore select a suitable sample size that allowed the research to be manageable (Sparkes and Smith, 2014). The selected sample for this study therefore consisted of five special needs school teachers.

3.3 Ethics

Silverman (1993) states, that researchers need to be aware of the possible ethical issues at every stage of the research process. Due to this before any data was gathered ethical approval was needed. In October 2013 therefore full ethical approval was granted through the dissertation supervisor in line with the Cardiff Metropolitan Research Ethic Committee (UREC, see appendix A). Gratton and Jones (2004) argued that to ensure ethical validity researchers must provide information sheets for participants and gain informed consent by each participant. Due to this after ethical approval was granted both an information sheet and consent form was given to each participant before starting data collection (see appendix B and C). The information sheet provided participants with the aims and objectives of the study, the roles and expectation of the participants and participants were also informed of their rights within the study and their right to withdraw at any point (Patton, 2002). In reflection the researcher believed that more specific information regarding the aims of the study should have been provided, this may have help participants be more aware of what was being asked of them. No names were used

throughout the research process, and no information of any of the participants was made available to anyone but the researcher, this includes any information regarding the students in their care. This was done to ensure the confidentiality of the data (Graton and Jones, 2004), participants therefore were assigned pseudonym to conceal their identity in the analysis chapter.

3.4 Pilot Study

A pilot study is a small-sample study conducted as a prelude to a larger scale study or clinical trial (Polit and Hungler, 2003). Typically, a pilot study has similar methods and procedures to the larger future study which yields data to help justify the larger study (Jairath, Hogerney and parsons, 2000) and/or test procedures for it. A pilot study has numerous purposes, such as developing and testing the adequacy of research instruments, assessing the feasibility of a full study and/or testing protocols for the larger study (Polit and Hungler, 2003). For the present study the pilot study aimed to test procedures such as, the interview guide, the order of the questions and the positioning of the Dictaphone. After the pilot study the researcher decided that there was two changes that could be made to improve the interview guide (found in appendix D). Firstly the wording of some questions were changed so that they were clearer and more specific, this allowed participants to better understand what was being asked of them. Secondly the researcher found that the questions could be ordered differently to improve the progression of the interview. By changing the order of the questions a greater logic and flow of questions was apparent and it also allowed the researcher to avoid any repetition of answers.

3.5 Procedure

Firstly before contacting participants the researcher made contact with the head teacher of each respective school. Once the head teacher agreed to allow their colleagues to participate participants were given information sheets explaining, explaining the aims and objectives of the study, their roles within the study and furthermore the rights of the participants. A consent form was also provided with the information sheet, and once consent was given and the forms gathered, data collection started.

Participants were Interviewed one on one with the researcher, Armour and Macdonald (2012) suggests that one on one interviews allow researchers to gain in-depth quality information from participants, including views and beliefs relevant to the research topic. Interviewing principles were consistent with Brenner’s (1981) interview techniques represented in table 4.

Table 4. Brenner’s (1981) Interview Techniques.

Interview principle	Technique
1	All questions were asked using the language established on the schedule.
2	Every question that applied to the respondent was asked where necessary.
3	The respondent’s understanding of questions was checked and prompts were used to seek further information rather than to lead.
4	Where necessary, the respondent’s understanding of questions was checked.
5	Where the respondent chose not to give an answer no suggestions were made by the interviewer.
6	Questions were repeated when requested by the interviewee.
7	Confidential information such as pupil, teacher or school names, given during interview were not included in transcriptions or in any reporting of the data.

Open ended questions were used within the interviews this allowed a ‘broad parameter’ for the interviewees to answer questions in their own words concerning the topic put forward by the interviewer (Roulston, 2010, p. 12). Interviews lasted thirty-forty minutes allowing for informal conversation near the start to help build a rapport with the interviewee (Armour and Macdonald, 2012). This left sufficient time for participants to give detailed and sufficient answers for each question. Interviews were semi-structured, where the same topics of conversation were asked to all participants however not necessarily in the same order or phrased in the same way (Sparkes and Smith, 2014).

3.6 Data Analysis

Content analysis involves 'identifying, coding, categorising, classifying and labelling patterns' that occur within the data (Patton, 2002, p463). Content analysis allows the researcher to test theoretical issues to enhance understanding of the data. The present study used a mixture of both an inductive and deductive data analysis approach. A deductive approach is where the researcher goes into the data analysis process with some key themes already established (Elos and Kynga, 2008). The present study included two deductive themes; inclusion and teaching styles and strategies. However this study also adopted an inductive approach to data analysis, an inductive approach refers to analysis where a phenomenon is described and categories are derived from the data without prior bias (Elos and Kynga, 2008). By utilising both approaches the researcher was able to create categories of data that were specific the aims and objectives of the study but also allow for categories of data that presented itself within the data that the researcher may not have considered but are relevant to the study. Hsieh and Shannon (2005) suggested that there are six steps to qualitative content analysis. In order to follow these six stages the researcher recorded all interviews using a dictaphone. A simple word processing package (Microsoft Word 2007) was used for the data management process and displaying the data. Illustrated in the Table below is an adapted version of these six steps made suitable for the present study.

Table 5. Hiesh and Shannon (2005), Six steps of data analysis.

Step	Action
1	After the completion of interviews voice recordings were transcribed; this provided a description of the interactions that took place during the discussion of inclusion in a PE environment.
2	The next step is to organize the qualitative data. This process includes open coding, creating categories and abstraction. Open coding means that notes and headings are written in the text while reading it.
3	The written material is then read through again to check the consistency of the coding. As many headings as necessary were written down in the margins to describe all aspects of the content. Initially, the researcher tested the coding system on a sample text in order to check its suitability.
4	After this open coding, the lists of categories are grouped under higher order headings. The aim of grouping data was to reduce the number of categories by collapsing those that are similar or dissimilar into broader higher order categories.

5	The penultimate phase of the analysis consisted of making sense of the themes and categories, and their properties. This included making comparisons, using frameworks to interpret data, drawing conclusions from the data and finally if appropriate generating theory.
6	Finally, the researcher reported the findings, in terms of the patterns, themes and categories uncovered during data collection. Conclusions were made, using quotations from the data as justification.

3.7 Trustworthiness

Trustworthiness is concerned with whether the researcher has established confidence in the truth of their findings and the context in which the study was undertaken (Lincoln & Guba, 1985). Trustworthiness can be addressed through the combined principles of credibility, transferability, dependability and confirmability. Credible research refers to whether the findings of a study are agreed by the participants involved (Lincoln and Guba, 1985). In order to increase the credibility of the present study the researcher sent a copy of the transcripts to the participants to 'member check' meaning, to check that they were accurate with what they had said. Credibility was also enhanced by a thorough providing "thick descriptions" within analysis (Gasson, 2004). Rich descriptions not only explain participants' experiences of phenomena but also of the contexts in which those experiences occurred.

Transferability refers to the extent to which the reader is able to generalise the findings of a study to their own context and addresses the core issue of "how far a researcher may make claims for a general application of their theory" (Gasson, 2004, p. 98). This can be achieved when the researcher provides sufficient information about them self, the research context, processes involved, participants, and researcher-participant relationships. This enables the reader to understand how the findings may transfer. Detailed descriptions about the study and its aims and objectives were therefore provided in both the study and the information packs provided to the participants. Furthermore information regarding the researcher and the nature of undergraduate research was also provided, this aimed to enable other researchers to make judgements about the research and its findings (Shenton, 2004).

Dependability refers to 'the coherence of the internal process and by the way the researcher accounts for changing conditions in the phenomena' (Bradley, 1993: 437). Dependability was established by the researcher making sure that the method was reported in detail, this enabled future researchers to be able to repeat the work. An interview guide was used during the interviews, this ensured that the questions the participants were asked were the same. This aimed to ensure the consistency of the questions asked, thus increasing the dependability of the study. Furthermore if any changes were made during data collections the researcher highlighted what had changed and justified why, this aimed to increase the dependability by explaining all the processes the research went through.

Confirmability according to Shenton (2004) requires steps to be taken to help ensure that the work's findings are the result of the experiences and ideas of the participants, rather than the researcher's. This was done through giving the participants a copy of the transcripts to read through, thus making sure that their opinions had been portrayed and documented correctly. To further enhance the confirmability of the study appendices and tables were used to demonstrate links between the data and results. This enabled the researcher to provide a clear connection between the raw data and the discussion helping confirm the reliability of the study. Finally when conducting the interviews the researcher made sure that they did not influence their answer, only providing a context if asked by the participant.

Chapter 4

Results and Discussion

4.0 Results and discussion

The following section will discuss the results gathered from interviews conducted with five special needs school teachers. By utilising a deductive data analysis approach, where the researcher goes into the data analysis process with some key themes already established (Elos and Kynga, 2008), the present study included two deductive themes; inclusion and teaching styles and strategies. This study however also adopted an inductive approach to data analysis, an inductive approach refers to analysis where a phenomenon is described and categories are derived from the data without prior bias (Sparkes and Smith, 2014). By utilising both approaches the researcher was able to create categories of data that were specific the aims and objectives of the study but also allowed for new categories of data that presented itself within the data. For this reason within the three key themes sub-constructs are used as sub headings, this aimed to support the clarity of findings and highlight the different themes that were apparent in the raw data. Within each section a key results table is provided abstracted from the full results tables found in Appendix E, this aimed to provide the reader with a clear link between the discussion and the raw data collected.

4.1 Inclusion

Table 6. Definition of inclusion

Participant	Quote	Themes
Teacher A	For me inclusion is providing ways and means of accessing everything in education, I suppose that just because a child is in a wheel chair some say they can't be able to take part in PE, but you need to adapt it to the child so they can be involved in every part of school life. obviously even out in society as well where they're accepted as there's different children with different needs but they are human beings the same, so it's really acceptance and being able to participate in as much of everything they can in life and in school.	Inclusion definition Government perspective
Teacher B	I think, inclusion to me is that children are included in every possible activity, that is relevant and that any child would be involved in, so PE is a really, really important one. They see so much of things happening all the time, Sport is quite high up on the television and things like that so it's really important for them to kind of have that aspect	Inclusion definition
Teacher C	At a first level inclusion can mean including children in your class group, it can then be getting different classes working together, I mean we have done in the past is reverse inclusion where we had children from main school will come into our school which is a good	2 aspects of inclusion. 1) Inclusion within a class. 2)

	starting point for us, I mean it's easier for our student to include that way with our mainstream peer's. And then expanding outwards we've been out to festivals with other special schools and We also get new sports leaders coming from the local secondary school to here.	Inclusion between different classes.
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A primary aim of the present study was to question special needs school teachers about their beliefs about inclusion, for this reason participants were asked to provide a definition of what inclusion means to them. Teacher A suggested:

For me inclusion is providing ways and means of accessing everything in education. I suppose that because a child is in a wheel chair some say they can't be able to take part in PE, but you need to adapt it to the child so they can be involved in every part of school life.

Similarly teacher B highlighted the how inclusion is related to allowing students to access all that school life has to offer, stating *"Inclusion to me is that children are included in every possible activity that is relevant and that any child would be involved in. So PE is a really important one"*. Other participants also supported this view of inclusion. The United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2008) described inclusion in education as an *"on-going process aimed at offering quality education for all"* and describes how in doing so respect needs to be shown to the diversity, different needs and capabilities of each student (p18). Findings are similar to this definition as teacher A argued that as a teacher *"you need to adapt PE to the child so they can be involved in every part of school life"* highlighting the need for teachers to consider diversity and different needs and capabilities of each student under your care. As a consequence findings provide further support for inclusive practices in schools as children deserve to have the chance to participate in aspects of school life including PE an opinion shared by many government organisations (DfES, Removing barriers agenda, 2004; Every Child matter Agenda, 2003).

4.1.1 Benefits of including SEND children in PE

Table 7. Benefits of PE

Participant	Quote	Benefits
Teacher A	I think for some of the children, epically the autistic children I think they're able to let out some of their energy and that then helps them, very often, to be able to focus better so I think even though it's a physical activity I can help them to focus better when they	Energy release. Improve focus.

	<p>have something to do a little later on</p> <p>Then from the governments point of view we are sort of a society where some people may really be doing some exercise where others aren't, so as a school we really want to push a healthy life style, so therefore It's really important that we try and get children to exercise otherwise they might just sit down and TV so for those health reasons its real good.</p>	Exercise as a life style.
Teacher B	I think it's just too really build their experiences, because even though there is lots of inclusion are children don't really go to say after school club or sports clubs, and things like that. So it's really important that we give them those experiences within the school day.	Build experiences
Teacher C	I think breaking it down, there's the physio which maintains the mobility which supports independence, there's physical activities that can support the behaviour, and then if you moving on to the actual strictly PE curriculum which is adapted from the main stream curriculum you've got the begins of say learning the rules to a game aspects, copying actions which are cognitive skills and the opportunity to copy this action by watching me and repeating, turn taking, joining in with others, learning to work with others, different skills, learning different life skills, and hopefully for some students possibly life skills for leisure activities	<p>Physio benefits.</p> <p>PE specific skills e.g., turn taking</p>
Teacher D	So social interaction, cooperation, exploring different activities and different equipment, and for our under stimulated young man it's about livening him up really, for others however its more about doing more calming things and for others its more about their physio needs.	Physio

Rouse (2006) discusses the importance of inclusive practice for students with disabilities in PE and how it provides the opportunity to socialise with general peers and develop relationships, as well as develop fundamental motor skills (Rouse 2006, p3). The present study was able to ask participants what they believed the benefits are for SEND students taking part in PE and why it's important for them. Teacher C suggested:

There's the physio aspect which maintains the mobility which supports independence, and then if you moving on to the actual strictly PE curriculum which is adapted from the main stream curriculum you've got the begins of say, learning the rules to a game, copying actions which are cognitive skills turn taking and hopefully for some students possibly life skills for leisure activities.

Teacher C demonstrates how for children with SEND, PE can provide the opportunity for students to develop many different skills. An interesting point raised was the opinion that for many SEND children PE offers that opportunity for physiotherapy, suggesting that it helps with mobility. This suggestion was also

shared by other participants also highlighted how PE provides the opportunity for physiotherapy and improving physical well-being. This perhaps can be seen as a benefit of PE that might not be considered in a mainstream school setting, or in Rouse's (2006) suggestions regarding the benefits of inclusion in PE. Results further support the importance of ensuring all children have the opportunity to take part and experience PE and also highlight how the benefits of PE for children with SEND may differ to children in a mainstream school setting.

Other benefits described by participant C describe more PE specific benefits, such as *"learning to work with others"* and *"learning the rules to games"*. Other participants made similar suggestions, teacher B stated that *"PE is not only good for developing their gross and fine motor skills; it's also a really good communication type activity as well"*. So teachers have suggested that PE offers students the opportunity to develop certain skills that might not be as easy to develop in other lessons. Other results suggest PE offers time for energy release as teacher A described how PE can help improve student's concentration in other class as it serves to allow them to have some energy expenditure (see teacher A in table 6). Teachers A and C further argued that the inclusion of SEND children in PE also has benefits to the government explaining how *"as a school we really want to push a healthy life style so therefore It's really important that we try and get children to exercise"*. Findings highlight that PE also has benefits in regards to life after school and promoting a healthy life style.

Whitehead (2000) argued that PE aims to promote; health, vocational preparation, appreciation for sporting culture and tradition, cognitive development and artistic awareness. However results demonstrate that the benefits of PE for SEND students might differ to the benefits of main stream schools, the present study argues therefore that perhaps the aims and objectives of PE in special needs schools should be different. For example Teacher B stated that for SEND children and PE that *"it's not always going to look the same as sport elsewhere but they're doing a sport that's appropriate for them"*. This further highlights how PE should perhaps be considered slightly different in special needs schools but only because those children may benefit from PE in different ways. Consequently findings support Armstrong (2005) suggestion that, inclusion for pupils with SEND should be recognised as a process that is responsive and flexible to pupil needs, and moves beyond traditional concepts of integration into mainstream PE methods. Conversely

however it is important to recognise this may be hard to apply practically in some schooling environments. For example some schools have partner special needs schools, and so it may be important for both schools to offer the same aims and objectives aimed to increase equality.

4.1.2 Barriers to participation

Table 8. Barriers to participation

Participant	Quote	Barriers
Teacher A	I suppose it's the more severe disabilities especially the children in wheelchairs, obviously that's a large barrier as they may not be able to move physically, they may not be able to move their arms and legs. Equipment sometimes, budgets of schools can be a tricky as they don't allow for everything.	Physical restrictions. Equipment and budget.
Teacher B	I suppose PE in school; I think one of our biggest barriers is our facilities as they're possibly not set up particularly well for PE, so our kind of PE space is our dinner hall which perhaps isn't the most appropriate space. I think staffing is probably another, because obviously for our children on their OT statements include hydro therapy which has to be staffed quite highly and again it kind of links in with the facilities again as sometime our hydro pool may not be working properly so that causes a bit of an issue. And I think possible another barrier is actually their engagement, because lots of them are very active so they will run around the playground and things like that but when you try and build it into a more structured time they find it quite hard to engage in it	Facilities. Staffing. Lack of engagement
Teacher C	Possibly sensory difficulties, physical difficulties, behavioural issues, lack of staff support. I mean these are all thing I would try to overcome I wouldn't let them be a barrier but these are all things we do have to overcome	Sensory, Physical and behavioural.
Teacher D	So physical restrictions and disability, with autistic students perhaps it's play skills or anxiety around equipment so we've got a young man where anything new can cause a great deal of anxiety, there are problems around managing feelings and expressions so perhaps not quite that persistence that you may find within a mainstream schools, and so equipment as well.	Physical restrictions.
Teacher E	In my mind, it falls into three camps. You've got the physical barriers, so if you're in a chair, how are you going to practice this skill, or it might be a that a child is not in a chair but still very shaky on their feet so if they're going to participate using her arms she needs to be sitting down because if she's standing up, all of her concentration is going on balance of standing up and she's not thinking about using her arms. Then I think you've got social barriers because often in mainstream, you would take it for granted and say get into pairs and practice this together and they don't have that instinctive response to play together and be interested in what the other children are doing, so there's that kind of social barrier to PE where you're kind of having to be the middle man in that game.	Physical restrictions. Social barriers.

	I think you've got behavioural issues because. So it might be that they're either really scared, for example, we've got his one child, who seems to have recovered now, but last year, he hated the seesaw and was really frightened of it so he couldn't use it, it wasn't a rational fear, he just really didn't like it.	Behavioural.
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During interviews participants were asked to describe what barriers to participation they come across when trying to include children with SEND in PE. All five participants described physical restrictions as a potential barrier to participation, for example Teacher E gave a practical example:

So you've got the physical barriers, say if you're in a chair, how you are going to practice this skill. Or it might be that a child is not in a chair but still very shaky on their feet. So if they're going to participate using her arms they need to be sitting down because if they are standing up, all of their concentration is going on balance of standing up and so they are not thinking about using her arms.

Teachers A, B and D all described how a lack in school facilities and equipment can also be a potential barrier to participation, teacher B described how the physical environment available for PE can be a barrier stating “*I think one of our biggest barriers is our facilities as they're possibly not set up particularly well for PE, so our kind of PE space is our dinner hall which perhaps isn't the most appropriate space*”. Furthermore both teacher D and E described how PE equipment can actually be a barrier it's self in regards to feelings of anxiety experienced by children around specialist PE equipment. Teacher D explained how “*with autistic students perhaps anxiety around equipment, so we've got a young man where anything new can cause a great deal of anxiety*”.

Another barrier described by participants also referred to staffing or a lack of staffing and how that can be a potential barrier to participation in PE. Teacher B provided an example of how a lack of staffing can cause difficulties, describing how “for our children on their OT statements include hydro therapy which has to be staffed quite highly” and so when staff is low for example due to illness teachers are not able to perform certain activities like hydrotherapy due to the amount of staff needed to ensure safety. Support for this was also provided by teacher C. Teachers B, C, E and D all described behavioural and social barriers to participation including

a lack of engagement, social awareness, poor behaviour issues and problems with managing feelings. For example teacher E commented suggesting how:

I think you've got social barriers because often in mainstream, you would take it for granted and say get into pairs and practice this together, but some don't have that instinctive response to play together and be interested in what the other children are doing, so there's that kind of social barrier to PE.

Pivik, McComas and Laflamme (2002) performed a study that aimed to question what barriers teachers come across in including children with SEND in PE. They found that four categories of barriers to participation were apparent: (a) the physical environment (e.g., narrow doorways, ramps); (b) intentional attitude barriers (e.g., isolation, bullying); (c) unintentional attitudinal barriers (e.g., lack of knowledge, understanding and awareness); and (d) physical limitations (e.g., difficulty with manual dexterity). However Pivik et al (2002) highlighted in reviewing their research that similar research needs to examine the barriers to participation for students with a wider range of disabilities. The present study therefore was able to examine how these barriers may differ for teachers working in special needs schools, and due to the nature of special needs schools, provide examples from a range of children with different disabilities.

The present study provided support for two of the four categories of barriers to participation described by Pivik et al (2002); all five participants described physical barriers to participation. Teachers also suggested potential barriers regarding the physical environment for example not having a purpose built sports hall. No support however was found for barriers related to intentional and un-intentional attitudinal barriers meaning no teachers suggested that poor attitudes towards inclusion and inclusion incentives was a barrier to participation. Conversely results from the present study have suggested other barriers to participation that Pivik et al (2002) did not consider, these include: equipment issues, anxiety around specialist equipment, lack of staffing and social and behavioural barriers. As a consequence the present study suggests that when considering barriers to participation for children with a wider range of SEND, that in addition to the four categories of barriers described by Pivik *et al* (2002) being: (a) the physical environment; (b) intentional attitude barriers; (c) unintentional attitudinal barriers; and (d) physical limitations, that three more categories of barriers that were apparent. These include: (e) Staffing (e.g., lack of staff support); behavioural and social barriers (e.g., lack of

engagement); and equipment issues (e.g., lack of specialist equipment), including anxiety towards equipment.

4.2 Teaching Styles and Strategies

As well as beliefs about inclusion the present study also aimed to discover what teaching styles and strategies special needs school teachers use to enable their students to participate in PE. As a consequence during interviews teachers were asked to provide examples of strategies they use for example, language strategies and adjustment strategies. During interviews therefore participants were asked whether or not they consider what teaching styles they use in PE lessons and if so what style do they use.

Table 9. Teaching styles

Participant	Quote	Teaching style
Teacher A	<p>I think obviously it depends on what we're doing, obviously they do very often need to be told exactly what we are going to be doing, but say in some of the autistic classes sometimes they will do say a section every morning just to help them engage and improve their focus on work, and they tend to do the same activity every morning for a block of time and so when the students start to do it often they can become more independent because they will they know what it's that they have got to do,</p> <p>I suppose it's as if you can go from you example of command style, but once you generate that regular activity then students are almost able to take more responsibility for themselves leading towards allowing the children to be more involved.</p>	<p>Style promotes Independence through repetition.</p> <p>Command style.</p>
Teacher B	<p>Well it's the same in main stream really as you have different learning styles and so you have to meet those even in a class of 30 and possibly will have to SEN children with a class of 30 so it's just doing lots of teaching styles and so it's the same within special needs but it is just a little bit more specific.</p> <p>So with ASD children you would take a teacher approach as they like everything structured and they like everything to be very visual where as your PMLD they needs lots of secure lots of safety making sure they are ok in their chairs making sure that activities are safe for them to do.</p> <p>Yes, in my job because my focus in on ASD, we tend to follow a teach approach to structured learning, so everything is very routine based, everything is very visual, so using lots of symbols, so that they know its PE as they have their visual timetable which will tell, and we've got symbols everywhere to help them know what to do, and then we also do quite a lot of repetitive work so that they understand that that is the routine so with circuits we have different things set up and they move around. Or it might be that we do one activity a week depending on time depending on</p>	<p>Need for a variety of teaching styles.</p> <p>Different styles for ASD and PMLD students.</p> <p>Structured learning.</p> <p>Visual resources</p>

	whether we have had any issues within the class.	
Teacher C	Oh definitely yes, well if I was teaching an autistic class I might use symbols and I would have this very clear lay out e.g. pick up a label put it in the box, come back. And I would possible structure short activities. With my class which has children with complex needs and physical difficulties you could fill the room with objects and leave them lying around I wouldn't have to manage the resource so carefully I could just have them there and use the sensory objects. It's all about knowing your learners	Visual resources for ASD. Less structured for PMLD.
Teacher D	PE for post 16 isn't really lead in not sort of delivered in a structured lesson so it's about young people accessing things individually as independently as possible but with support of teaching assistants	Independent.

Research highlights the need for a range of teaching styles to be used to best improve learning (Mosston and Ashworth, 2002: Byra, 2006: Metzler, 2000). Teachers A, B, C and D all supported this notion of using different teaching styles when considering different children with different needs. For example teacher B described how there is the need to vary teaching styles exactly the same as in mainstream schools but perhaps a bit more specific in special needs. Teacher A suggested that when working with the children in their class that “*I think obviously it depends on what we're doing, obviously they do very often need to be told exactly what we are going to be doing*”, teacher A also continued to compare her suggestion to the command style, an example provided in the information pack given to them weeks before the interview. stating:

I suppose it's as if you can go from your example of command style, but once you generate that regular activity then students are almost able to take more responsibility for themselves lending towards allowing the children to be more involved.

This description of how command style can be used to allow student to act in a more independent way differs to that suggested by Mosston and Ashworth (2000). Teacher A has suggested, that by using command style alongside a routine based approach, it can actually help SEND students become more independent and take more responsibility in their learning. As a consequence, results suggest that command style can in fact allow some students act more independently, and so could be utilised by teachers when working with children who prefer routine based learning such as, some children with autism spectrum disorder (ASD).

Other results indicated that teachers A, B, C and D all believe that teaching styles should differ between classes within special needs schools due to different needs of the students. For young adults in post sixteen, teacher D stated:

PE for post 16 isn't really lead in a structured lesson, so it's about young people accessing things individually as independently as possible but with support of teaching assistants.

When considering PE for students with ASD teachers A, B and C all described how they believe a structured, teacher approach is most appropriate. For example teacher B suggested:

So with ASD children you would take a teacher approach as they like everything structured and they like everything to be very visual. We tend to follow a teach approach to structured learning, so everything is very routine based, everything is very visual, so using lots of symbols.

Teachers have argued that when working with ASD students that they prefer a more structured approach to learning. Results also indicated that teacher believe that they also respond well to visual stimulation and the use of symbols. When considering children with profound and multiple learning disabilities (PMLD) however teacher's B and D argue that different teaching styles are more suitable for their needs. Teacher C described how:

With my class which has children with complex needs and physical difficulties you could fill the room with objects and leave them lying around I wouldn't have to manage the resource so carefully I could just have them there and use the sensory objects.

Furthermore teacher B also stated "for your PMLD, they needs lots of secure lots of safety making sure they are ok in their chairs making sure that activities are safe for them to do". So results indicate that with PMLD student's teachers believe a less structured approach benefits them more, perhaps due to their more severe physical disabilities. As a consequence of these findings results indicate the need for special needs teachers to really consider the teaching styles they use when working in different classes, as different students with different needs may respond/benefit more to certain teaching styles.

4.2.1 Language Strategies

Table 10. Language strategies

Participant	Quote	Language style
Teacher A	You've got to use simple commands and very often in small sentences, like we would say "we want you to throw the ball into the hoop" we would them probably show them. Then there's makaton, not everybody can use it but there are certain actions you can use to help explain what we want them to use, like the sign for throw which some children would understand more. I think with something like PE actually modelling and showing is the best way to explain along with small short commands. It's not worth giving them lots of information because they wouldn't be able to cope with that.	Simple Commands. Short sentences. Makaton.
Teacher B	you've kind of got a wide range of children, say your ASD children you've got to be really specific with, just a few words and mainly visual clues, so symbols to show the things they can do, lots of modelling as well with them. With you PMLD children and SLD children I think it's just lots of encouraging them and making sure that they know it's safe and that is going to benefit them and be a fun experience to do and just making it a most powerful experience as possible by just reinforcing, we're going to do this now, this is what we're going to do now.	ASD- specific short sentences PMLD- encouragement
Teacher C	keep it very, very simple, and you might use symbols or signing to reinforce it	Simple with symbols and signing
Teacher D	Well I would like to think that we adapt our language constantly with every activity that we do really. So simplifying, very clear instructions, short sentences, telling students what we do want them to do and not what we don't want them to do, and that kind of thing. Yes so short and clear sentences maybe one and two step instructions.	Short sentences
Teacher E	Well, PE is like any lesson really, stripping back the language so it's very simplified. You would maybe drop some of the more complex sentences making them very short so, ball and net, throw the ball, you do it, so very short, not more than three to four words at the max. Yes, simple commands and very much imperative verb use so jump now or throw now or that kind of thing.	Simplify Short sentences Simple commands

Rouse (2006) argued that different language strategies can help children with autism engage more in lessons. Due to this the present study questioned participants about how they might adapt their language when working in special needs schools where a wide range of children with different SEND are found. Results indicated that all five participants believed that simple, short sentences are most appropriate in PE in special needs schools. Teacher A for example stated, "you've got to use simple commands and very often in small sentences, like we would say "we want you to throw the ball into the hoop" we would them probably

show them”. Other results described how language used might differ between classes and how other forms of communication can aid students understanding. Teacher B described how they would change the type of language used based on children’s needs, for ASD students teacher B suggests “say your ASD children you’ve got to be really specific with, just a few words and mainly visual clues, so symbols to show the things they can do”. However when considering classes with children with PMLD and SLD teacher B described how they would change their language stating:

With you PMLD children and SLD children I think it’s just lots of encouraging them and making sure that they know it’s safe and that is going to benefit them and be a fun experience to do.

Findings suggest that different students with different educational needs may respond better to different types of language. As a consequence teachers should consider the class they have and their preferences when deciding what type of language they may use in PE. Furthermore mentioned previously teacher B described how visual aids can help with communication with some children, this was supported by teachers A and C. Moreover teacher A suggested that teachers could use makaton alongside simple commands to encourage students to participate. Makaton is a simpler sign language which is very often used in special needs schools. Findings suggest therefore that visual aids can also help in communication and explaining activities and a useful strategy that teachers may choose to utilise. Potential limitations of these findings however is whether or not teachers would be able to adapt their language for every child when considering there may be a class of 5-12 children who may have different preferences.

4.2.2 Teaching Strategies for Inclusion, Practical Examples

Table 11. Teaching strategies for inclusion

Participant	Quote	Example
Teacher A	Yes well I suppose in PE when we’ve done bowling we’ll have ramps and we’ll put those up to a child’s wheelchairs and then we’ll also use lighter balls so that at least then a child can hold the balls with support and then roll it down rather than throwing it down	Bowling
	I suppose as well when we’ve done sports at school we’ve used like small javelins which are polystyrene that they can throw as they are lighter but still allows them to do it. A lot of times with	Javelin

	<p>the children they just need constant support in telling them what they need to do next.</p> <p>Sometimes they need models to be shown what to do, so very much it can be visual for some children so we show them first so they can see.</p>	
Teacher B	<p>Obviously you have to take into account and a huge thing you need to consider is the environment you are in, so making sure that it is safe environment, with ASD with an enclosed environment, with say your PMLD children it's a warm environment as well, so obviously you wouldn't take them out on a really cold day and do PE in the playground.</p> <p>Also your resources you need to consider, whether they're resources are safe, whether they are appropriate for what you want to do.</p> <p>I think with the resources as well there's lots of visuals resources as well, so that they children can see what they need to do so they can experience it. And then having the teaching assistants as well on hand to help work and develop those skills.</p> <p>Also we have clubs that actually come into school, they ask to come into school to work with our children and I think that is just to promote inclusion, just for everyone to have a better understanding about it really. We try and make links with the local secondary school; they send some of their young leaders over to work with our children, so again just too really make that inclusion. We use their facilities as well for sports day, but my plan is for us to work together slightly a bit more than just a couple of times a year. So that's sort of my ambition to build links with them.</p>	<p>Considering your environment.</p> <p>Safety considerations</p> <p>Visual resources</p> <p>Links with surrounding schools.</p>
Teacher C	<p>Well things like the resources you might use, so in my class we use a jingle ball which is a large bit yellow ball which makes a sound for children with sensory difficulties, for health and safety you might want to use soft ball instead of hard ones, that kind of thing.</p> <p>For children with autism you need very visual considerations. So say if you were playing a game of rounder's or basketball you would put a dot on the floor for where the bowler stands rather than just saying stand here you would put a dot, I mean that's a very normal strategy used for lots of children, but you need very visual constructions of the activity.</p> <p>So for children with sensory needs it important to be aware of what they like and don't like so you can use vibration and air to make it interesting for them, parachutes and things.</p> <p>Also completely adapting a game, if you were doing athletics for wheel chair users, I mean again you might have come across this, say with the long jump you could do a wheel chair push where you push a child in a wheel chair and that's their long jump or hurdles you could push them over a rope say how many times can you do it in a minute, so it's using very creative lateral thinking about how they can take part.</p>	<p>Jingle balls.</p> <p>Visual resources.</p> <p>Adapting Games. Athletics.</p>
Teacher D	<p>Well we haven't got the best equipment here but we do try to do the best with what we can find really. They bowl, so out children bowl sometimes so we've got specialist equipment to make that</p>	<p>Bowling.</p>

	possible for wheel chair users so we can differentiate the activity according the equipment. So it's sort of like a ramp really. So it just helps those who might not have the strength, or movement ability to join in really.	
Teacher E	The biggest change for me is that you have to plan for each individual child as opposed to planning for them in groups so for each child you have to think of a way to incorporate them so what I tend to do when we have PE lessons is that I've tied it into when we have access to physio. Some for some children, I can plan a lovely lesson and try to incorporate them but physio is going to be more important for them so what I try to do is work with the physio is trying to come up with a physio program that ties in for say those four children that's going to link in with what we're doing in the main PE lessons.	Individual planning.

A primary aim of the present study was to provide examples of how teachers might adapt activities to allow children with SEND to participate in PE. Many studies have proven that inclusion strategies are of great value to students and that they can increase participation (Rizzo and Vispoel, 1991; Atkinson and Black, 2006; Goodwin and Watkinson, 2000) but many fail provide practical examples of how these strategies are used and how activities can be adapted. For this reason the following section solely aimed to provide some practical examples of teaching strategies used and examples of adapted activities that SEND teachers believe allow their students to take part in PE.

First of all Participants described how in planning PE lessons there are certain considerations teachers should make to ensure PE lessons run smoothly. Teacher B argued:

a huge thing you need to consider is the environment you are in, so making sure that it is a safe environment, with ASD with an enclosed environment, with say your PMLD children it's a warm environment as well, so obviously you wouldn't take them out on a really cold day and do PE in the playground.

Findings illustrate that when planning PE there are certain considerations you should make to ensure students are in a suitable environment. Similarly teacher E described how as a teacher you need to consider the individual needs of each student when planning a PE lesson, explaining how you can incorporate the different needs such as phsio therapy into lessons, stating: *“so what I try to do is work with the physio's trying to come up with a physio program that's going to link in with what we're doing in the main PE lessons”*. Furthermore teacher C argued that when working with

Autistic students there are visual consideration you can make. Teacher C provided a practical example of a visual consideration teachers can make in a sport context:

say if you were playing a game of rounder's or basketball you would put a dot on the floor for where the bowler stands rather than just saying stand here you would put a dot, you need very visual constructions of the activity.

As previously explained the present study aimed to provide some practical examples of adapted activities, teachers A, C, D and E all described how they are able to use adaptive equipment to make particular activities accessible to their students. For example teacher A and D described how they can adapt bowling for students:

In PE when we've done bowling we'll have ramps and we'll put those up to a child's wheelchairs and then we'll also use lighter balls so that at least then a child can hold the balls with support and then roll it down rather than throwing it down.

Another example includes adapted athletics activities. For example teacher C described how you can completely adapt an activity:

If you were doing athletics for wheel chair users, say with the long jump you could do a wheel chair push where you push a child in a wheel chair and that's their long jump, or hurdles you could push them over a rope say how many times can you do it in a minute, so it's using very creative lateral thinking about how they can take part.

Teacher C provided a really good example of how you can adapt activities to allow SEND students to take part in PE. Teacher C highlighted how teachers can try to be creative when planning PE and using equipment, this suggestion was supported by teacher E who stated "*it's just about being creative with what we've got really, thinking of using things perhaps not for their primary purpose*".

Other strategies referred to strategies teachers use for children with sensory difficulties, teacher C described how "*For children with sensory needs it important to be aware of what they like and don't like so you can use vibration and air to make it interesting for the*". Some examples of the types of activities that teachers described are good for students with sensory difficulties include using inflatable floater balls and jiggle balls to help stimulate students. Previous results illustrated that anxiety around equipment can be a potential barrier to participation, teacher D however argued by an adult modelling the use of equipment it can reduce that anxiety stating

“So that’s where modelling is really use full, de-sensitising over a period of time, so repeatedly showing the child a piece of equipment repeatedly exposing them to it”.

(For more information regarding modelling please see section 4.1.6)

The present study was able to not only discuss what strategies teachers use to try and include all their students in PE, but was also able to, unlike Goodwin and Atkinson (2006) study, provide practical examples of the strategies can be used in PE. This enables potential reader to have a more practical understanding of the different strategies used by teachers in real teaching environments. This aimed to create a resource that may be able to help potential SEND teachers, providing them with ideas and examples that they may choose to use rather than mere theoretical examples. A potential limitation to these findings however is the lack of step by step guidance for setting up these different activities as findings mainly make suggestions rather than instructions.

4.2.3 Modelling

Table 62. Modelling

Participant	Quote	Themes
Teacher A	<p>Yes well I suppose when we say model I suppose I mean more like, show the child what we want them to do. So say it was a physical activity we would physically show them. There are different things we use in school, we use makaton and symbols. Makaton is a simpler sign language which is very often used in special needs schools.</p> <p>One thing as well thinking about it, sometimes with some activities we would do them a couple of different occasions so they can build up from the previous week. So if it was for example that we wanted them to run to hoop, this example is more so regarding the more able students, we might repeat that over a few weeks as some students respond well to repeating actions as it helps them grasp the skill.</p>	<p>Demonstrating.</p> <p>Makaton</p> <p>Repetition</p>
Teacher B	<p>So it’s where they can watch either an adult carry out the task first or you help them slightly with manipulations so that they understand what it is they want you to do, because if you said to them throw the ball they possible might just throw it anywhere or they might just look at you as if they are to say what have you asked me to do, so it’s just lots of visuals for them and things like that.</p>	<p>Help with manipulations.</p> <p>Visual aid.</p>
Teacher C	<p>To model a game, well the adults model a game so that the students can see, I mean you know sometimes with our lessons I’ve got children with the most complex physical disabilities to they might need pushing around. So the adults will have a little game and get going and it will all turn really fun and although its sounds like it’s the adults that are having the game, they are giving the children the experience of the game, so it’s showing them the rules and the fun saying “oh we’ve got 3 goal, we’ve got 4 goals” you</p>	<p>Creating a fun environment.</p>

	know that kind of things, and then the children join in with that excitement and that sort of social communication. Or modelling is like you know, I'll hit a ball with the hockey stick and the children will see me do it and then they will know what they have got to do, and for the autistic children it's a good strategy as well, because if you just say there's the ball here's the stick, hit the ball but they are very visual learners so if they actually see the adults they are able to understand much clearer	Demonstrating.
Teacher D	So it's showing or using equipment themselves and then encouraging a child to copy. I couldn't do it without them definitely not but the ratios need to be really high because a lot of our young children are also autistic and so that often results in a lack of play skills so using equipment can be difficult purely because of the barriers around their perceptions of the equipment and so that's where modelling is so brilliant. Pupils can model for each other as well but often they kind of co-exist in a group rather than interacting perhaps in a way that young people in mainstream might. It helps them feel comfortable and confident about doing it.	Encouraging to copy. Reducing anxiety around equipment. Model for each other.
Teacher E	You just model to them what you want them to do but the difference is that you really have to show them every little step, so here I'm picking up the ball, I'm pulling my hand back and I'm going to reach forward and let go its kind in depth whereas in a mainstream class, you'd be like, right, throw the ball at the net	Showing every step.

When discussing the benefits of teaching assistants teachers referred to how adults can be used to model a game or activity, furthermore the term modelling was described as a tool teacher can use alongside language strategies to reinforce students understanding. In fact at some point in every interview each participant referred to modelling as strategy they use to aid the inclusion of SEND children in PE and therefore is a key finding of the present study. Teacher A stated:

I think with something like PE actually modelling and showing is the best way to explain along with small short commands. It's not worth giving them lots of information because they wouldn't be able to cope with that.

So teacher A suggests that modelling activities can be the best way to help explain activities to children with SEND. Furthermore teacher C argued that modelling can be particularly good for autistic children suggesting, *“for the autistic children it's a good strategy as well, because if you just say there's the ball here's the stick, hit the ball but they are very visual learners so if they actually see the adults they are able to understand much clearer”*. Teacher B defined modelling as where, *“they can watch either an adult carry out the task first or you help them slightly with manipulations so that they understand what it is they want you to do”*. This definition is supported by other teachers who all describe modelling as demonstrating activities or games to help students better understand what is being asked of them. Teacher C

added that by adults modelling a game, students can become more motivated to join in due to the excitement of the game demonstrated by the adults.

Results suggest that for children in specially needs schools, modelling games and activities can be a great way to explain to students what it is the teacher wants them to do. Graham (2008) argued that modelling can also be referred to as demonstrating and suggests that demonstrations in physical education are both motivational and instructional. The purpose of Weiss and Klint (2013) study was to examine developmental differences of modelling and verbal rehearsal on performance of a sequential motor task. The instructional conditions included: verbal model only, verbal model plus verbal rehearsal, verbal rehearsal only, and no model/no rehearsal. Analyses revealed that, for facilitating motor skill acquisition in elementary-aged children, a visual model by itself as a means of instruction may not be best but rather, visual models with verbal rehearsal lead to better motor skill acquisition. A potential limitation of this study however is the sample used as results are specific to elementary aged students. The present study therefore suggests that modelling can be a really use full strategy for special needs school teachers particularly in PE as visual aids can help students better understand verbal instructions and acquire skills.

Chapter 5

Conclusion

5.1. Concluding Remarks

A primary aim of the present study was to question special needs school teachers about their beliefs regarding the importance and benefits of inclusion for SEND children in PE. This aimed to assess whether the benefits of PE may differ for special needs children when compared to mainstream students. Results illustrated that there are many benefits for SEND children taking part in PE; enjoyment, development of gross and fine motor skills, communication skills and more. However other results found that there may be benefits of PE that may not be considered in a main stream school environment such as, physio therapy. Findings highlight how PE should perhaps be considered slightly different in special needs schools but only because those children may benefit from PE in different ways. Consequently findings support Armstrong (2005) suggestion that, inclusion for pupils with SEND should be recognised as a process that is responsive and flexible to pupil needs, and moves beyond traditional concepts of integration into mainstream PE methods.

During interviews participants were also asked to discuss the barriers to participation they come across for SEND students and PE, this aimed to question if the barriers for in special needs schools differ to that of mainstream schools. Result offered support for two of the four categories of barriers to participation described by Pivik *et al* (2002), physical barriers to participation and the physical environment. No support however was found for barriers related to intentional and un-intentional attitudinal barriers. Conversely results suggested other barriers to participation that Pivik *et al* (2002) did not consider, these include: equipment issues, anxiety around specialist equipment, lack of staffing and social and behavioural barriers. As a consequence the present study suggests that when considering SEND students that in addition to the four categories of barriers described by Pivik *et al* (2002) three more categories of barriers that were apparent, staffing, behavioural and social barriers, and equipment issues including anxiety towards equipment.

Secondly research aimed to question teachers about what teaching styles and strategies they use to enable them to include their students in PE. This aimed to provide a resource that potential special needs school teachers could use to find practical examples of the teaching strategies used by qualified, experienced teachers. When considering teaching styles and language strategies results indicated the need for special needs teachers to really consider the teaching styles

they use when working in different classes, as different students with different needs may respond/benefit more from particular teaching styles.

The present study was also able to provide practical examples of how teachers might adapt activities to allow children with SEND to participate in PE. The rationale for this was how within the literature review, although many studies have proven that inclusion strategies are of great value to students (Atkinson and Black, 2006; Goodwin and Watkinson, 2000), but many failed to provide practical examples of how these strategies are used and how activities can be adapted. By providing some practical examples therefore this study aimed to offer support and ideas of how you can adapt activities for potential SEND teachers. A key finding of the present study was how all participants described how teachers and teaching assistants can model activities for students. Teachers believed that by modelling an activity it can help students better understand verbal instructions lending support to the findings of Wiess and Klints (2013) study who argued models with verbal instructions can lead to better motor skill acquisition. As a consequence the present study suggests that modelling can be a really useful strategy for special needs school teachers particularly in PE as visual aids can help students better understand verbal instructions and acquire skills.

5.2. Limitations and Future Research Directions

Following the completion of the research, there are number of future research recommendations which can be made. Firstly a potential limitation of the present study was the small sample size. Due to time constraints placed on the study it meant that only a small sample of special needs school teachers took part in the study. However the strengths of this study also lies within the participants that took part. Although only five teachers participated, the information and experience they had within this field allowed for a good in-depth insight into their school life and the delivery of PE for children with SEND. In the future, researchers should consider implementing a more in-depth study into the teaching strategies used in special needs school for inclusion in PE with a larger sample size.

Results indicated that participants believed different teaching styles and strategies were better suited to different classes within special needs schools. For example, for Autistic student's participants described a very structured approach to

teaching but for profound and multiple learning disability classes (PMLD) teachers suggested a less structured approach was better for their educational needs. For this reason future research could perform a similar study, questioning special needs school teachers about the teaching strategies they use in PE, but specifically for different classes. For example, autistic, PMLD and SLD classes.

In reflection another potential limitation of the present study is the quality of interviews as the researcher was relatively inexperienced in performing interviews. Although the pilot study helped Kvale and Brinkmann (2009) argue not everyone is trained to interview skilfully and systematically, so it is a skill that can easily lapse. For example interview can be flawed due to inadequate preparation and/or subjective process where judgement may be based on first impressions. Due to the researchers lack of experience therefore it can be argued that interviews may not have produced the highest quality of data. Conversely however, the interviews were conducted with participants with a lot of experience around the research topic, the argument can be made therefore that the quality of data is due to the participants rather than the interviewer.

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Appendices

Appendix A

Ethical Approval



Cardiff
Metropolitan
University

Prifysgol
Metropolitan
Caerdydd

Date: 5/3/14

To: Thomas Turrell

Project reference number: 13/05/380U

Your project was recommended for approval by myself as supervisor and formally approved at the Cardiff School of Sport Research Ethics Committee meeting of 29th May.

Yours sincerely

A handwritten signature in blue ink that reads "Daniel Milton".

Daniel Milton
Supervisor

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Appendix B

Information letter

Dear staff members,

My name is Thomas Turrell and I am currently studying for a degree in Sport and physical education at Cardiff Met University. In my time studying at university I have gained a particular interest in how Physical Education can be made accessible to all students no matter their ability or circumstances. I believe this interest in inclusive pedagogies stemmed from my own personal experience of having a younger brother with profound learning and physical difficulties. Due to having been able to witness the quality of teaching provided within special needs schools, I believe the practices shown by special needs school teachers may be able to aid the wealth and depth of inclusion research.

The aim of the present study therefore is to interview special needs school teachers and investigate what teaching styles and/or strategies, in their experience of teaching; best facilitate the inclusion of all students within PE lessons. The information provided aims to provide a resource that other special needs school teachers may choose to use to aid their ability to deliver high quality inclusive lessons in PE.

I would like to invite you to participate in this research. If you choose to take part, you will be asked to attend an interview at a date, time and place of your choosing at some point over the next two weeks. The interview will last approximately 30 minutes where participants will be asked to talk about their experience of teaching PE. We will discuss what styles or strategies of teaching you might use that enable you to allow all students to participate and moreover why you might think it is important to do so. For the purposes of this study no information regarding student behaviour, actions or identity will required, furthermore at no point within the study will any personal information about you or the school will be published within the study (e.g. Names of participants, pupils or the school.) For your participation in this research it is essential that I have the consent of yourself. If you agree to being involved in the study I will distribute a consent form to yourself and will require your written consent.

By agreeing to participate in this research you are agreeing that your data can be used for scientific purposes and possibly published in a scientific journal. However all data collected will be kept confidential, stored securely and only be viewed by the researchers working on the project. I would like to add that your involvement in the research would be entirely voluntary and you would be free to withdraw from this study at any point. If you would like to withdraw from the study at any point all I would request is that you write to me using the contact details provided and when confirmed any data involving your contribution will be destroyed.

If you have any queries or would like to discuss the research further, please feel free to contact me from the details found below. Furthermore I would like to inform you that full ethical approval was granted for this study to take place. Finally I have provided the contact details of my dissertation supervisor Daniel Milton, if you should wish to make any further queries please feel free to contact him via email.

Yours truly,

Thomas Turrell.

Contact details

Email: st20005949@outlook.cardiffmet.ac.uk

Telephone: 07972315614

Daniel Milton Email: dmilton@cardiffmet.ac.uk

Appendix C

Consent form

PARTICIPANT CONSENT FORM

UREC Reference No:

Title of Project: What teaching styles/strategies best facilitate the inclusion of children with special educational needs in PE

Name of Researcher: Mr Thomas Turrell

Participant to complete this section: Please tick each box.

1. I confirm that I have read and understand the information sheet dated for this. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation) is voluntary and that it is possible to stop taking part at any time, without giving a reason.

3. I also understand that if this happens, our relationships with Cardiff Met, or our legal rights, will not be affected.

4. I understand that information from the study may be used for reporting purposes, but that my identification if asked will not be identified.

5. I agree to take part in this study and for findings to be used

Name of Participant

Signature of Participant

Date

Appendix D

Interview Guide

Interview Guide

PARTICIPANTS DETAILS

Name:

Age:

Sex:

Years of employment:

Interview date:

Time begun:

Time ended:

Duration of interview:

Greeting, how are you? Busy week

-So I'm Tom Turrell and I'm a third year at university and so I'm doing my dissertation. Thank you for agreeing to take part.

-In this study I am interviewing special needs school teachers to try and get a greater understanding of how PE lessons are implemented within special needs schools.

-The aim of the present study therefore is to interview special needs school teachers and investigate what teaching styles and/or strategies, in their experience of teaching; best facilitate the inclusion of all students within PE lessons.

-The information provided aims

-I will be using a tape recorder

-As a participant in this study you have several rights. Just to remind you.... entirely voluntary, you are free to decline to answer any question.

-If there are any questions you do not feel comfortable answering simply state 'no comment',

-The interview contains several sections dealing with various topics that may be important or relevant to you and your experiences. At the end of each section there will be an opportunity for you to add anything that you felt was important and not covered in the questions asked.

-Do you have any questions now about what I have talked about so far? Ok lets go.

SECTION 1: INTRODUCTION QUESTIONS

To start the interview I would like to find out about you.

1.1. Just to clarify, how long have you been a teacher?

1.2. How many years have you been a teacher at this school?

1.3. Do you enjoy being a Special needs school teacher?

Probe: Why?

1.4. Did you have positive PE experiences at school when you were younger?

Probe: Why? What things contributed?

SECTION 2: The following sections are related to topics that were highlighted in information pack provided. First, I would like to concentrate on your opinions on inclusion.

2.1. Do you think it is important for all children to experience PE?

Probe: Why do you think that?

2.2. How important do you feel regular, structured PE lessons are for children with SEN? Why?

2.3. So what do you think are the main benefits of children taking part in PE?

Probes: does it help concentration in other classes? Do they enjoy PE lessons? Why?

2.4. Do you think it is important for children to take part in PE as a class together?

Probe: If so why?

2.5. How would you define "inclusion" in regard to the participation of children with SEN in PE within your setting?

SECTION 3: In this section questions will be related to teaching styles and strategies and how they may relate to inclusion.

3.1. A strategy referred in research is the use of teaching assistants, When in PE lessons what do you think the benefits of having teaching assistants are?

Can you give an example?

3.2. Do you think students experience better quality of PE with teaching assistants?

3.3. How do you create lessons where different ability pupils can all participate, meaning what measures do you take to ensure "reasonable adjustments" are made for these pupils?

Practical examples? Teaching styles?

3.4. How might you adapt your use of language when working with special needs students?

3.5. What are some of the barriers to participation you come across in PE?

List barriers and refer back to for further questions,

E.g. language

3.7. So when teaching PE lessons do you consider what teaching style you use? If so, what styles do you adopt? Why? Can you give me an example in a lesson

3.8. Do you use individual programmes for your students in P.E? How does that help?

SECTION 4: In this section I will be asking you questions that focus on the National Curriculum and teacher training.

4.1. What are the guidelines for PE in the school's curriculum, meaning how often do children take part in PE per week?

4.2. Do you think that is a suitable amount?
Probe: if No or Yes why?

4.3. Do you think the NC provides enough support for special needs schools on how to include all students in PE?

4.4. If not what improvement do you think could be made?

4.5. How do you feel your postgraduate or other equivalent training course prepared you for working with children with SEN?
If yes or No, why

4.7. How has training changed since your first started working with these children?

SECTION 5: CONCLUSION.

OK, we have now covered all the areas related to my research question, to finish

5.1 Is there anything else you'd like to add with reference to inclusion?

5.2 As a teacher what advice would you give to other teachers to encourage inclusion of all pupils?

- 5.3 Is there anything you would like to add in regards to teaching strategies, anything you think is important to consider when supplying PE lessons in special needs schools?

Feedback Question

- 5.3 How do you think the interview went?
5.4 Did you feel that you were able to express your opinions?
5.5 Did I lead or influence your answers in any way?

Thank you for taking the time and helping me out with this study.

Appendix E

Full Results Tables

Table 13. Teaching Styles and Strategies full results table.

Participant	Quote	Themes
Teacher A	<p>Yes well I suppose in PE when we've done bowling we'll have ramps and we'll put those up to a child's wheelchairs and then we'll also use lighter balls so that at least then a child can hold the balls with support and then roll it down rather than throwing it down</p> <p>We've also done some circuit training where the children might have to try and throw or roll something into a hoop, perhaps with bigger balls so that they can grasp it better, although sometimes some children can use smaller balls, it really just depends on the child's needs</p> <p>Oh and I suppose with balancing, if say there were to walk across a bench we would normally have quite wide ones and then provide that child with support to walk across as with some children their balance might not be that good so therefore you would provide support with a hand, if I child needed to experience a short run if there is a child in a wheelchair somebody would run with them so that they would still join in on the experience of movement and walking forward</p> <p>I suppose as well when we've done sports at school we've used like small javelins which are polystyrene that they can throw as they are lighter but still allows them to do it. Allot of times with the children they just need constant support in telling them what they need to do next. Sometimes they need models to be shown what to do, so very much it can be visual for some children so we show them first so they can see.</p>	<p>Adjustment strategies, Practical examples.</p> <p>Bowling.</p> <p>Circuit training.</p> <p>Balancing.</p> <p>Javelin.</p>
	<p>Yes well I suppose when we say model I suppose we mean more like, show the child what we want them to do. So say it was a physical activity we would physically show them. There are different things we use in school, we use makaton and symbols. Makaton is a simpler sign language which</p>	<p>Modelling.</p> <p>Physically show.</p> <p>Makaton.</p>

	<p>is very often used in special needs schools.</p> <p>One thing as well thinking about it, sometimes with some activities we would do them a couple of different occasions so they can build up from the previous week. So if it was for example that we wanted them to run to hoop, this example is more so regarding the more able students, we might repeat that over a few weeks as some students respond well to repeating actions as it helps them grasp the skill, as you know a mainstream child may be able to see it just the once and do it allot of the children in our school, depending on the grades, will need to practice allot more, encouragement and more showing for them to grasp it.</p>	<p>Repetition.</p>
	<p>Yes, you've got to use simple commands and very often in small sentences, like we would say "we want you to throw the ball into the hoop" we would them probably show them. Then there's makaton, not everybody can use it but there are certain actions you can use to help explain what we want them to use, like the sign for throw which some children would understand more. I think with something like PE actually modelling and showing is the best way to explain along with small short commands. It's not worth giving them lots of information because they wouldn't be able to cope with that.</p>	<p>Language strategies.</p> <p>Visuals with instructions.</p>
	<p>Right, I think obviously it depends on what we're doing, obviously they do very often need to be told exactly what we are going to be doing, but say in some of the autistic classes sometimes they will do say a section every morning just to help them engage and improve their focus on work, and, they tend to do the same activity every morning for a block of time and so when the students start to d it often they can become more independent because they will they know what it's that they have got to do, they often have a certain amount of time and its often motivated by music so like they will have a certain amount of music then you'll tell the children we're going to stop them we're going to more onto the next activity, as some children have time tables where they will say go to the next station. And then some children can actually pick up what to do, they still need encouraging and showing but there will be some children eventually who will be able to do something independently which is good.</p> <p>Command style- yes I suppose it's as if you can go from you example of command style, but once you</p>	<p>Teaching styles for PE</p> <p>Independence through repetition.</p> <p>Music</p> <p>Command style</p>

	<p>generate that regular activity then students are almost able to take more responsibility for themselves leading towards allowing the children to be more involved.</p>	
	<p>Yes children are always assessed to see what p level they are where obviously we do have some guidelines to see how we can progress children. Yes so we would plan the lesson considering the p level and our aim will be to progress them. So say again if we were doing transferring I would plan what I want to see from each student based on their programme.</p>	<p>Individual programmes</p>
<p>Teacher B</p>	<p>Obviously you have to take into account and a huge thing you need to consider is the environment you are in, so making sure that it is safe environment, with ASD with an enclosed environment, with say your PMLD children it's a warm environment as well, so obviously you wouldn't take them out on a really cold day and do PE in the playground, so that's kind of one of the biggest things. Also your resources you need to consider, whether they're resources are safe, whether they are appropriate for what you want to do, and I think with the resources as well there's lots of visuals resources as well, so that they children can see what they need to do so they can experience it. And then having the teaching assistants as well on hand to help work and develop those skills.</p> <p>Also we have clubs that actually come into school, they ask to come into school to work with our children and I think that is just to promote inclusion, just for everyone to have a better understanding about it really. We try and make links with the local secondary school; they send some of their young leaders over to work with our children, so again just too really make that inclusion. We use their facilities as well for sports day, but my plan is for us to work together slightly a bit more than just a couple of times a year. So that's sort of my ambition to build links with them.</p> <p>We also, well Bristol is quite strong, as when we had the seco's (The Seco Technical Education Programme) there was lots and lots of work going on about inclusion, and obviously we had lots of meetings and events planned and things like that. But then the funding stopped, and then urm, so we've kind of been working together with other local</p>	<p>Adjustment strategies and strategies for inclusion. environment</p> <p>Links to other schools</p> <p>Inclusion festivals</p>

	<p>special schools. So we were at UWE (University of West England) the other day for an inclusion, winter Olympic day where lots of the special needs schools came together and spent time there. Again that's kind to do with communication and ways of building other skills and experience's with other people not just those in our school environment.</p> <p>I know that one of the classes have a dance company come in to work with them for one of their PE lessons which they really, really enjoy which again isn't applicable to say my class as my class wouldn't enjoy that and I think that's what people don't understand about SE I think that they think that everyone should be included in all the same activities all the time but, you've got to think is it beneficial to my pupils, it's like when we had a hockey club that came in once and one of the boys from my class was invited to go along and in the end I just took him back to the class, just because he just wasn't benefiting from it, he wasn't enjoying it, he was actually possibly going to cause a danger to himself or others because he was kind of just running up and down in the end, so even though it was a lovely thing for him to be involved in, I had to look at the fact that he wasn't actually engaging in any of it at all so would he better back in his environment where things are very structured and he can go and participate and get on, or to keep him in this environment where he's not gaining anything from it really. So that links to the last question about individual programmes in that it's about find what is ideal for them</p>	<p>Communication.</p> <p>Dance classes.</p>
	<p>So it's where they can watch either an adult carry out the task first or you help them slightly with manipulations so that they understand what it is they want you to do, because if you said to them throw the ball they possible might just throw it anywhere or they might just look at you as if they are to say what have you asked me to do, so it's just lots of "throw the ball" "this is how we throw the ball" we want it to land here to there's lots of visuals for them and things like that.</p>	<p>Modelling.</p> <p>Providing visuals.</p>
	<p>You've kind of got a wide range of children, say your ASD children you've got to be really specific with, just a few words and mainly visual clues, so symbols to show the things they can do, lots of modelling as</p>	<p>Language strategies.</p> <p>Really specific.</p>

	<p>well with them. With you PMLD children and SLD children I think it's just lots of encouraging them and making sure that they know it's safe and that is going to benefit them and be a fun experience to do and just making it a most powerful experience as possible by just reinforcing, we're going to do this now, this is what we're going to do now so yeh.</p>	
	<p>Yes well obviously, well it's the same in main stream really as you have different learning styles and so you have to meet those even in a class of 30 and possibly will have to SEN children with a class of 30 so it's just doing lots of teaching styles and so it's the same within special needs but it is just a little bit more specific. So with ASD children you would take a teacher approach as they like everything structured and they like everything to be very visual where as your PMLD they needs lots of secure lots of safety making sure they are ok in their chairs making sure that activities are safe for them to do.</p> <p>Yes, in my job because my focus in on ASD, we tend to follow a teach approach to structured learning, so everything is very routine based, everything is very visual, so using lots of symbols, so that they know its PE as they have their visual timetable which will tell, and we've got symbols everywhere to help them know what to do, and then we also do quite a lot of repetitive work so that they understand that that is the routine so with circuits we have different things set up and they move around. Or it might be that we do one activity a week depending on time depending on whether we have had any issues within the class.</p>	<p>Teaching styles for PE.</p> <p>Need to differ for different classes.</p> <p>Teach approach.</p> <p>Structured learning.</p>
	<p>Yes, and lots of our children have what we call an engagement profile which is concerned with engaging them ready for learning and things like that. And quite allot of those activities are kind of exercise based activities so it could be like, bouncing on the ball ten times and then doing some wall presses and things like that just to get them ready for the next step, so we can use PE kind of as a reward because they love say the trampolines over in the nexus centre, so I thinks it's just making it an enjoyable experience for them, but yes there's still people who think that PE should try ad look like mainstreams schools but it's not going to, I mean</p>	<p>Individual programmes</p>

	<p>I've also got that experience in main stream n and even in a mainstream class children with ASD as they are still not going to be able to fully participate so you've got to make those adaption's and meet those children's needs within that's lesson. It's like for children like that, just going in to a different environment they may find really difficult to begin with as they like their very safe, structured areas so as soon as you take them into a new place they can become very agitated and that might cause the low level behaviours, so yes.</p>	
<p>Teacher C</p>	<p>Well things like the resources you might use, so in my class we use a jiggle ball which is a large bit yellow ball which makes a sound for children with sensory difficulties, for health and safety you might want to use soft ball instead of hard ones, that kind of thing. For children with autism you need very visual considerations, this has probably come up ion mainstream research as-well. So say if you were playing a game of rounder's or basketball you would put a dot on the floor for where the bowler stands rather than just saying stand here you would put a dot, I mean that's a very normal strategy used for lots of children, but you need very visual constructions of the activity. So for children with sensory needs it important to be aware of what they like and don't like so you can use vibration and air to make it interesting for them, parachutes and things. Adaptive resources so using a ramp, and also completely adapting a game, if you were doing athletics for wheel chair users, I mean again you might have come across this, say with the long jump you could do a wheel chair push where you push a child in a wheel chair and that's their long jump or hurdles you could push them over a rope say how many times can you do it in a minute, so it's using very creative lateral thinking about how they can take part.</p>	<p>Adjustment strategies.</p> <p>Sensory equipment.</p> <p>Visual considerations.</p> <p>Adaptive resources</p> <p>Adapting games/activities</p>
	<p>To model a game, well the adults model a game so that the students can see, I mean you know sometimes with our lessons I've got children with the most complex physical disabilities to they might need pushing around. So the adults will have a little game and get going and it will all turn really fun and although its sounds like it's the adults that are having the game, they are giving the children the experience of the game, so it's showing them the rules and the fun saying "oh we've got 3 goal, we've</p>	<p>Modelling.</p> <p>Visual clues.</p> <p>Modelling a game.</p>

	got 4 goals” you know that kind of things, and then the children join in with that excitement and that sort of social communication. Or modelling is like you know, I’ll hit a ball with the hockey stick and the children will see me do it and then they will know what they have got to do, and for the autistic children it’s a good strategy as well, because if you just say there’s the ball here’s the stick, hit the ball but they are very visual learners so if they actually see the adults they are able to understand much clearer	
	keep it very, very simple, and you might use symbols or signing to reinforce it	Language strategies. Simple, and symbols.
	Oh definitely yes, well if I was teaching an autistic class I might use symbols and I would have this very clear lay out e.g. pick up a label put it in the box, come back. And I would possible structure short activities. With my class which has children with complex needs and physical difficulties you could fill the room with objects and leave them lying around I wouldn’t have to manage the resource so carefully I could just have them there and use the sensory objects. It’s all about knowing your learners	Teaching styles for PE. Symbols. Different for different classes.
	Yes definitely so I might have different resources for each child and adapt the strategies, I mean you’ve got to try and keep it more or less the same activity but with different strategies to help them access it	Individual programmes
Teacher D		
	well we haven’t got the best equipment here but we do try to do the best with what we can find really. And because its unstructured, with the equipment we use as we do have some specialist equipment, we tend to use therapy balls which are pretty much accessible to most young people with support, we’ve used a see-saw which again is pretty accessible ok so they bowl, so out children bowl sometimes so we’ve got specialist equipment to make that possible for wheel chair users so we can differentiate the activity according the equipment. So it’s sort of like a ramp really. So it just helps those who might not have the strength, or movement ability to join in really.	Adjustment strategies. Therapy balls. Bowling.
	So it’s showing or using equipment themselves and	Modelling

	<p>then encouraging a child to copy. I couldn't do it without them definitely not but the ratios need to be really high because a lot of our young children are also autistic and so that often results in a lack of play skills so using equipment can be difficult purely because of the barriers around their perceptions of the equipment and so that's where modelling is so brilliant. and pupils can model for each other as well but often they kind of co-exist in a group rather than interacting perhaps in a way that young people in mainstream might. It helps them feel comfortable and confident about doing it.</p>	
	<p>Well I would like to think that we adapt our language constantly with every activity that we do really. So simplifying, very clear instructions, short sentences, telling students what we do want them to do not what we don't want them to do, and that kind of thing. Yes so short and clear sentences maybe one and two step instructions.</p>	<p>Language strategies. Clear, short instructions.</p>
	<p>PE for post 16 isn't really lead in not sort of delivered in a structured lesson so it's about young people accessing things individually as independently as possible but with support of teaching assistants</p>	<p>Teaching styles for PE Pupil centred</p>
	<p>We don't but for some of the autistic classes they will use a very structured lesson with certain time limits on certain equipment. But because we are post 16 with young adults for us it is more about choice making and more kind of experiences. I wouldn't want to impose too much structure to a student who is 18 or 19 so</p>	<p>Individual programmes</p>
Teacher E	<p>I think one of the tricky things about PE is that in mainstream you very much group the children and model what you wanted them to do and they would do it independently and then you'd go around and feedback to what the different groups are doing, whereas here, I think you have to have quite a clear structure so often in PE lessons I try to structure it so that it's a round robin so we do different things, we're having different experiences as we go round and we're doing five minutes on each thing. We can't practice and practice at schools as the children get bored and lose concentration so we try and do short bursts.</p> <p>The biggest change for me is that you have to plan</p>	<p>Adjustment strategies. Short burst to keep engagement. Individual</p>

	<p>for each individual child as opposed to planning for them in groups so for each child you have to think of a way to incorporate them so what I tend to do when we have PE lessons is that I've tied it into when we have access to physio. Some for some children, I can plan a lovely lesson and try to incorporate them but physio is going to be more important for them so what I try to do is work with the physio's trying to come up with a physio program that ties in for say those four children that's going to link in with what we're doing in the main PE lessons so</p> <p>for example we've just done rolling and ball work. Two of my children will be coming out of their wheelchairs supported by the class team or the ITT or the physio. Once the physio has shown us the program and given us some example of the exercises which we can actually do if the physio wasn't there. The physio's have been fantastic for me because it's really important for me that especially for the children in wheelchairs that they develop a more physio based PE experience rather than just coming in to the lesson and play. So they are sat with the adults sitting behind them, getting them to roll a ball away and then into their bodies. They're experiencing rolling over a ball and having balls around them, coming towards etc. So the children are having some physio exercises with a nod to the theme of the rest of the class</p>	<p>planning.</p> <p>Work with physio's.</p>
	<p>You just model to them what you want them to do but the difference is that you really haven't show them every little step, so here I'm picking up the ball, I'm pulling my hand back and I'm going to reach forward and let go its kind in depth whereas in a mainstream class, you'd be like, right, throw the ball at the net.</p>	<p>Modelling.</p> <p>Showing them what they are asking them to do.</p>
	<p>Well, PE is like any lesson really, stripping back the language so it's very simplified. You would maybe drop some of the more complex sentences making them very short so, ball and net, throw the ball, you do it, so very short, not more than three to four words at the max.</p> <p>Yes, simple commands and very much imperative verb use so jump now or throw now or that kind of thing.</p>	<p>Language strategies.</p> <p>Short and simple sentences.</p>

	<p>For each child that does physio, I would do an individual program and then for the other, they would all have individual targets that might be better but for a lot of the other children a similar activity but it would means tailoring the level of support. So, for the child that's very passive, I might be trying to move him from a full physical prompt just to a partial physical prompt over the whole term but some of my other children will start with a model and then we'll move up to independent and then we might try some new skills. So each child has the same lesson but mostly tailored around how much input and support they get as to how they might progress in the skills and then if the more able ones are doing really well, I may introduce a new slightly trickier skill, I might say to the child, now you've done that, you've done really well one let's try moving back a bit.</p>	<p>Individual programmes</p>
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Table 14. Inclusion full results table.

Participant	Quote	Theme
<p>Teacher A</p>	<p>Most definitely, I think a big part of the school that I work obviously inclusion and being able to participate in everything the school has to offer is really important, so yes.</p>	<p>Importance of Inclusion of SEN children in PE</p>
	<p>I thinks it's good, because obviously we have a wide range of different children with needs in the school, we'll have children that are completely able bodied, but then we've got other children how are in wheel chairs but obviously it's great that they can still participate, and you know, use different parts of their body in different ways which can help in lots of different ways.</p>	<p>Regular structured PE Physical benefits</p>

	<p>I think for some of the children, especially the autistic children, yes, because I think they're able to let out some of their energy and that then helps them, very often, to be able to focus better so I think even though it's a physical activity I can help them to focus better when they have something to do a little later on</p> <p>Yes definitely, yes I think with some of the children again especially the autistic children and also perhaps the more able bodied I think it does help, as I think being able to go outside it's a different experience as well</p> <p>Probably some of the things I have said. In regards to movement, obviously from a health point of view, and then from the governments point of view we are sort of a society where some people may really be doing some exercise where others aren't, so as a school we really want to push a healthy life style, so therefore It's really important that we try and get children to exercise otherwise they might just sit down and TV so for those health reasons its real good.</p>	<p>Main benefits of children taking part in PE</p> <p>Mental benefits</p> <p>Concentration</p> <p>Health benefits</p> <p>Benefits to society</p>
	<p>Oh I think that if they can perform together obviously most classes have some of the same ability but others may have different, but of course I think it's nice to do everything as a class, some of them may develop friendships so it's good really.</p>	<p>Benefits of taking part in PE as a class together.</p> <p>Friendships</p>
	<p>For me inclusion is providing ways and means of accessing everything in education, I suppose that just because a child is in a wheel chair some say they can't be able to take part in PE, but you need to adapt it to the child so they can be involved in every part of school life and obviously even out in society as well where they're accepted as there's different children with different needs but they are human beings the same so it's really acceptance and being able to participate in as much of everything they can in life and in school.</p>	<p>Definition of inclusion</p>
	<p>I suppose it's the more severe disabilities especially the children in wheelchairs, obviously that's a large barrier as they may not be able to move physically, they may not be able to move their arms and legs. Equipment sometimes, budgets of schools can be a tricky as they don't allow for everything.</p>	<p>Barriers to inclusion of SEN in PE.</p> <p>Physical, budget and equipment.</p>
Teacher B	<p>PE is not only good for developing their gross and fine motor skills, it's also a really good</p>	<p>Importance of Inclusion of</p>

	<p>communication type activity as well because it's not something you can do individually so it also helps our children with the communication aspect, and also PE can be a much wider and an area where you can get to meet people from other schools, and other settings and things like that.</p>	<p>SEN children in PE.</p> <p>Gross and fine motor skills.</p> <p>Communication</p>
	<p>It's really, really important. Obviously some of our PE sessions include things like Hydro and physio for children that need that extra support. The ASD (autism spectrum disorder) children need regular structured PE just because they seem to have so much energy, so we use, in my class, lots of different breaks during the day which are kind of like PE breaks, which are structured in the way that it's the same activity, so it's like the exercise ball, the trampet and things like that so they can actually go and have that moment just for a bit of energy expenditure</p>	<p>Regular structured PE.</p> <p>Energy expenditure.</p>
	<p>I think it's just too really build their experiences, because even though there is lots of inclusion are children don't really go to say after school club or sports clubs, and things like that. So it's really important that we give them those experiences within the school day, so as the kind in the main stream schools children can go to football after school and things like that and building skills. So we need to provide that opportunities for our children within the setting of our schools</p>	<p>Main benefits of children taking part in PE.</p> <p>Build experiences and skills</p>
	<p>Obviously each class is kind of slightly different. So where as your PMLD (profound and multiple learning disabilities) group they kind of have more of that social understanding and begin to work together a bit more where as you ASD (autism spectrum disorder) children are more independent/individually, so it tends to be more like work stations, so they are not necessarily working together but they are in the same space doing the same sorts of activities really</p>	<p>Benefits of taking part in PE as a class together</p>
	<p>I think, inclusion to me is that children are included in every possible activity, that is relevant and that any child would be involved in, so PE is a really, really important one. They see so much of things happening all the time, Sport is quite high up on the television and things like that so it's really important for them to kind of have that aspect</p>	<p>Definition of inclusion.</p>
	<p>I suppose PE in school, I think one of our biggest barriers is our facilities as they're possibly not set up particularly well for PE, so our kind of PE space is our dinner hall which perhaps isn't the most</p>	<p>Barriers to inclusion of SEN in PE.</p>

	<p>appropriate space, at primary obviously they have a kind of main which they are able to use for PE but it's still not particularly built for the purpose whereas the kind of newer buildings and things you can see that they are built ready for children with SEN to participate in sport. For example some schools have sunken trampolines which are amazing as you can just pop the children on and you can do rebound therapy without having to worry about lots of spotters whereas if you just had a normal trampoline it's got to be staffed so highly with spotters and then you would also need the clearance for the height. Yes so that's probably one.</p> <p>I think staffing is probably another, because obviously for our children on their OT statements include hydro therapy which has to be staffed quite highly and again it kind of links in with the facilities again as sometime our hydro pool may not be working properly so that causes a bit of an issue.</p> <p>And I think possible another barrier is actually their engagement, because lots of them are very active so they will run around the playground and things like that but when you try and build it into a more structured time they find it quite hard to engage in it</p>	<p>Facilities.</p> <p>Staffing.</p> <p>Lack of engagement.</p>
Teacher C	<p>Yes definitely, well I think physical wellbeing for all of us first of helps us all feel well and PE can help you to learn better, it can contribute to well being in life, and on many levels social skills it can help, PE as a lesson in special schools can help with social skills, communication, children can engage at a very sensory level as with children with very complex learning difficulties and sensory difficulties can still engage by using their senses. And if you get a game going it can make an atmosphere of fun and enjoyment which leads to engagement from that social game side of it. And the from the physical side it's always good as with whatever government information that is around for us to need to look after and maintain our bodies,</p>	<p>Importance of Inclusion of SEN children in PE.</p> <p>Develop social skills.</p> <p>Enjoyment.</p>
	<p>Very important I mean PE can cover a broad spectrum of things so for children with the most complex physical difficulties, and I suppose the question mark around this is whether physio is included with that as some people say yes some</p>	<p>Regular structured PE.</p> <p>Physio therapy.</p>

	<p>people say no, but for those children definitely physio, so I suppose I would include physio there, as for their stretches and movement and that will enable them learn and maintain their well being, maintain their mobility for the basic aspect of independence and things like that. For other children perhaps I challenge to their behaviour in that regular exercise can help them manage their behaviour, so it all has knock on effects to different aspects of their learning depending on the needs of the children. People talk about brain gym, I mean again is that PE isn't it, but those physical things are good</p>	
	<p>I think breaking it down, there's the physio which maintains the mobility which supports independence, there's physical activities that can support the behaviour, and then if you moving on to the actual strictly PE curriculum which is adapted from the main stream curriculum you've got the begins of say learning the rules to a game aspects, copying actions which are cognitive skills and the opportunity to copy this action by watching me and repeating, turn taking, you know PHSE aspect, joining in with others, learning to work with others, different skills, learning different life skills, and hopefully for some students possibly life skills for leisure activities</p>	<p>Main benefits of children taking part in PE.</p> <p>Independence.</p> <p>Cognitive skills.</p>
	<p>Definitely, because that's where you kind of get the social fun atmosphere from and the energy generated. I mean I've tried to do PE with one or two and you can do very individual things there but you can't kind of get the enjoyment level of a game. I think it tends to be on a experiential level, so you know you get the staff joining in and lots of students and there is lots of sort of laughter and shouting and that, again It's just experiencing a game doing things like a penalty shoot-out and it builds a bit of tension and that kind of thing which you can only do with a group, and a bigger group is better really. And in my experience when I've worked with children with autism you need a big group as you might have some children sort of wondering around on the side because they can't cope but as long as you have a core group that are enjoying themselves there is something for them to re-engage with.</p>	<p>Benefits of taking part in PE as a class together.</p> <p>Enjoyment.</p> <p>Re-engagement.</p>
	<p>At a first level inclusion can mean including children in your class group, it can then be getting different</p>	<p>Definition of inclusion</p>

	<p>classes working together, I mean we have done in the past is reverse inclusion where we had children from main school will come into our school which is a good starting point for us, I mean it's easier for our student to include that way with our mainstream peer's. And then expanding outwards we've been out to festivals with other special schools and I think we've even been to other festivals with other mainstream schools. We also get new sports leaders coming from the local secondary school to here and things like that. Getting outside professionals to support PE is giving the opportunities; I mean you know its good working with professionals.</p>	
	<p>Possibly sensory difficulties, physical difficulties, behavioural issues, lack of staff support. I mean these are all thing I would try to overcome I wouldn't let them be a barrier but these are all things we do have to overcome</p>	<p>Barriers to inclusion of SEN in PE. Physical, behavioural and staffing barriers.</p>
Teacher D	<p>In a way that is appropriate to them yes. I think it's good, I mean we've got a real diverse range of students in post 16 so it's important to different student for different reasons, but the freedom and being able to move around and to have space. Some of our children experience PE as part of their physio programme so it's important for them from a OT perspective. Yes its quite a nice time in terms of relationships as well</p>	<p>Importance of Inclusion of SEN children in PE. Physio. Friendships.</p>
	<p>Very important, so I only came to this class in January and one of the first thing I saw was that PE wasn't n their curriculum, so one of the first things I did was ensured that 2 of the 3 groups do PE every single day for half an hour, so yes I hold great value to PE.</p>	<p>Regular structured PE</p>
	<p>I mentioned how it's different for different children and I spoke about the difference between main stream where PE is more structured whereas PE for our guys which is more about their individual needs. So social interaction, cooperation, exploring different activities and different equipment, and for our under stimulated young man it's about livening him up really, for others however its more about doing more calming things and for others its more about their physio needs.</p>	<p>Main benefits of children taking part in PE. Social interactions, cooperation.</p>
	<p>Definitely, I think we see social interaction between them, co operation, turn taking and there is</p>	<p>Benefits of taking part in PE</p>

	<p>cooperation so you know if someone only really likes one thing it doesn't mean they can sit on that for half an hour where no one else can really get an opportunity to use it and they learn to tolerate one another.</p>	<p>as a class together. Co operation, social interaction.</p>
	<p>So physical restrictions and disability, with autistic students perhaps it's play skills or anxiety around equipment so we've got a young man where anything new can cause a great deal of anxiety, there are problems around managing feelings and expressions so perhaps not quite that persistence that you may find within a mainstream schools, and so equipment as well.</p>	<p>Barriers to the inclusion of SEN in PE</p>
<p>Teacher E</p>	<p>I do think so. I think from my perspective PE is probably one of the lessons the pupils engage with the most because they enjoy the active nature of the lesson and it's a break from sitting down which for our children, sitting down and concentrating is really hard and there's a lot of sensory feedback which you can incorporate into PE so I think it's really nice for a special school perspective.</p> <p>I think most children love PE, they love being competitive, they love being with their friends.</p>	<p>Importance of Inclusion of SEN children in PE. Engagement. Competitive.</p>
	<p>For the autistic classes certainly, it's a different ball game because for them it's really important to have to get that sensory feedback and to get their energy out and have that break</p> <p>For us, setting up for PE is a bit more laborious so there are some restrictions on how regularly we could do it but I definitely think that it's important for it to happen at least once a week because most of them do get a lot from it and they do really enjoy those afternoons and they engage with it well.</p>	<p>Regular structured PE</p>
	<p>I think certainly last year, I wouldn't say that the pupils particularly noticed each other but this year we've got two more children who are a bit more socially aware so for them it's quite important but I think again PE gives you a really opportunity to do things in pairs so a lot of targets are based along playing alongside others, rolling a ball to another person so I think it's a very good opportunity to get them into that or to shoehorn them in to be honest.</p> <p>I think it is a good lesson and gives you really good opportunities as a teacher to bring out playing with each other and to give it that purpose. We do, do</p>	<p>Benefits of taking part in PE as a class together. Playing, and fun.</p>

	<p>that at play times and things but PE is probably one of the easiest lessons to do that in yes, it's quite important.</p>	
	<p>In my mind, it falls into three camps. You've got the physical barriers, so if you're in a chair, how are you going to practice this skill, or it might be a that a child is not in a chair but still very shaky on their feet so if they're going to participate using her arms she needs to be sitting down because if she's standing up, all of her concentration is going on balance of standing up and she's not thinking about using her arms.</p> <p>Then I think you've got social barriers because often in mainstream, you would take it for granted and say get into pairs and practice this together and they don't have that instinctive response to play together and be interested in what the other children are doing, so there's that kind of social barrier to PE where you're kind of having to be the middle man in that game.</p> <p>I think you've got behavioural issues because again with mainstream you've got that ability to say if you're going to throw the javelin at so and so you're not going to have any playtime but that barriers there, that expectations there, whereas there'll be some children that can't use some of the equipment, it's not so much of an issue in my class, most things we are ok with, but even occasionally we find something. So it might be that they're either really scared, for example, we've got his one child, who seems to have recovered now, but last year, he hated the seesaw and was really frightened of it so he couldn't use it, it wasn't a rational fear, he just really didn't like it.</p>	<p>Barriers to the inclusion of SEN in PE.</p> <p>Physical.</p> <p>Social barriers.</p> <p>Behavioural.</p>

