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Full Title of Thesis: **Observing, Understanding and Developing Learning Dispositions in an Early Years Centre**

Summary (maximum 300 words)

This longitudinal study investigated young children's learning within an early years education and care environment. The qualitative research design adopted an action research approach. The research methodology included; parent and staff semi-structured and structured interviews, staff questionnaires, child observations and interviews. A key term in the research was that of learning dispositions to describe children's attitudes, actions and approaches to learning

The study paid particular attention to children's voice, to professional debate and the learning environment and to how these support the development of reflective practitioners and reflexive practice. This research aimed to link learning theory and child development with early years practice in a naturalistic setting. As a professional doctorate it linked research project design and implementation with pedagogic planning and practice over a three year period. The researcher played a pivotal role as the manager of the study setting.

During the research an observational framework, the child learning disposition observation tool (CLDOT), was developed. This was used to complete a series of child learning disposition observations (CLDOs). These observations identified children's learning dispositions and whether they adapted them to the different learning environments of inside or outside, adult-led or child-led activities. These observations then became part of the learning disposition activity (LDA) cycle. The LDA cycle gave staff a practical and objective process through which they could: think about children's learning and use this in the planning process; observe the children's learning comparing planning to practice; and deepen the reflections of practitioners and involve children in the process. The LDA instigated improvements to pedagogy and provided all involved in the research with a shared vocabulary and understanding of learning in the early years.

As such, the study makes a contribution to the education debate about what is the right start for our youngest children at this most precious time: their early years.

OBSERVING, UNDERSTANDING AND DEVELOPING LEARNING DISPOSITIONS IN AN EARLY YEARS CENTRE

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requirements for the degree of Doctor of Education

My research was undertaken under the auspices of the Cardiff Metropolitan
University

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**Last but not least I have only one thing to say to my husband
“I love you always but I did finish first”**

ABSTRACT

This longitudinal study investigated young children's learning within an early years education and care environment. The qualitative research design adopted an action research approach. The research methodology included; parent and staff semi- structured and structured interviews, staff questionnaires, child observations and interviews. A key term in the research was that of learning dispositions to describe children's attitudes, actions and approaches to learning

The study paid particular attention to children's voice, to professional debate and the learning environment and to how these support the development of reflective practitioners and reflexive practice. This research aimed to link learning theory and child development with early years practice in a naturalistic setting. As a professional doctorate it linked research project design and implementation with pedagogic planning and practice over a three year period. The researcher played a pivotal role as the manager of the study setting.

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GLOSSARY OF TERMS

CLDOT Child Learning Disposition Observation Tool: A learning typology, devised by the researcher in dialogue with staff in the study setting after a series of observations by adults of children in different learning situations

CLDO Child Learning Disposition Observations: A cycle of observations completed in four contexts: inside and outside the classroom, in adult-led and child-led situations

Continuous Provision: Set areas that are always available for the children to play within an early years setting

Day Nursery: Childcare for children aged 12 to 36 months paid by main carers

Early Years: For the purposes of this research, early years refers to children aged 12 to 60 months. The term is used in early years writing with a variety of punctuation styles. For the purposes of this research, it will normally be written in lower case without the use of the apostrophe indicating possession

Flying Start: Free childcare provision in Wales for children aged 24 to 36 months, 5 x 2.5 hr. sessions per week

Learning Disposition Activity (LDA): An activity devised in the research programme that incorporates child observation, planning, reflection and involves children in the process

Nursery School: A free school for children aged 36 to 60 months

Novice Learner: A shared and agreed definition developed in the study by the researcher and her staff to describe a child at the beginning of their learning journey

Capable Learner: A shared and agreed definition developed in the study by the researcher and her staff to describe a child who demonstrates some good learning skills and experiences

Practised Learner: A shared and agreed definition developed in the study by the researcher and her staff to describe a child who has very good learning skills and is an experienced learner

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CHAPTER 1 Introduction

1:1 Introduction

Learning is a process familiar to, and experienced by, every human being. It is something that I, as researcher and Manager of an Early Years Centre set in the South Wales Valleys, encounter every day. The understanding of learning has always encouraged debate: it is this that makes teaching and learning so fascinating and absorbing for me.

Britain has a long tradition of providing excellent nursery education and the Foundation Phase builds on this in Wales. The Early Years Centre used for this research was founded in the late 1920s on the educational ideas and theories of the McMillan sisters (Peltzman, 1998, pp.77-78), who are referred to by the Welsh Assembly Government (2008) in its document 'Learning and Teaching Pedagogy'. The children benefit from the common theory, practice and ethos evident between the Nursery School, Day Nursery and Flying Start settings established at the Centre. All of these settings aim to meet the educational and care needs of the children and their families. Since 2000, the Centre has developed from a traditional local authority Nursery School into the Early Years Centre that exists today. The children attending the Centre, a working and constantly evolving environment, became my research population. The research group consisted of 30 children aged 24 to 48 months. Many of them had attended both the Centre education and care settings. This was an action research project and, as such, it aimed to: identify and explore the learning dispositions of young children, enable children to develop positive and effective approaches to learning, improve pedagogy by developing the staff as reflective practitioners, encourage children to understand and reflect more on their own learning and give them a voice in the learning process.

The timing of this project is apt because of the introduction of the Foundation Phase for children aged 3 to 7 in Wales in 2007 (Welsh Assembly Government, 2007). This policy aimed to transform early years care and education. It set guidelines on how children of this age should experience learning and the outcomes to be expected from this process. The Foundation Phase provides an appropriate skill-based curriculum and provides guidance and suggestions for observational assessment procedures for early years education. This study supports this principle by using longitudinal, in-depth observations of children 24 to 48 months. Importantly, as far as this research was concerned, the Welsh Assembly

Government acknowledged the connection between observation of children, teaching strategies and individual learning styles. 'By using a variety of teaching methods practitioners will be able to determine the learning preference/styles of individual children,' (Welsh Assembly, 2008a, p.6). Examining the nature of these connection forms the theoretical basis for the professional change and action research contained in this study.

It was envisaged that the aims mentioned above would be achieved by answering the following research questions:

RQ1 Can we identify, observe and understand learning dispositions in children aged two to four years?

RQ2 Do young children change their learning dispositions with age, or adapt them to different learning environments?

RQ3 How is it possible to adapt pedagogy to influence a child's learning potential through understanding their acquisition and use of learning dispositions?

To answer RQ1 and RQ2, the research focused on improving our understanding of how children aged two to four approach learning and, further, how this improved understanding can be used in practical learning situations. This was achieved by becoming conversant with the relevant literature on previous research into learning styles/dispositions and by drawing upon earlier cognitive and psychological theories as well as information about child development. In this regard, child observations were carried out that explored children's understanding about their own learning dispositions and their metacognitive knowledge and experiences. RQ3 was approached by investigating how early years practitioners used the findings and methodological tools developed through this research to change and improve interaction with and provision for the children in their care, enabling them to experience and master the learning disposition most appropriate for any specified activity. The background literature on action research, reflection and organisational change specifically informed this research question

There is a wide range of teaching and learning strategies used in both educational and care settings in the early years. Stephen (2009, p.17) suggests:

Pedagogical practices observable in early years' settings range from didactic interactions more typically associated with teaching, through modelling, prompting exploration, questioning, scaffolding specific skill acquisition and nurturing a child's disposition to learn.

All of these strategies were used at the Centre to varying degrees. This research raised the profile of the latter practices. These approaches require individual attention and a low adult to child ratio. This has been made possible by the introduction of the Foundation Phase in Wales, when an adult to child ratio of 1:8 in nursery education was recommended (Welsh Assembly Government, 2007). The care settings at the Centre have an adult to child ratio of 1:3 and the school setting an adult to child ratio of 1:8.

RQ1 and RQ2 in this study connected learning theory and child observations in the context of a 'real-life' situation that exists in an Early Years Centre. As a professional doctorate, it aimed to give both practitioner and child an increased number of teaching and learning techniques and to improve the use of existing strategies. This research was about 'how children learn' and the ways in which this influenced the everyday interaction that occurs between the child and the early years professional and amongst children themselves. Very young children are establishing and practising the skills they use to learn, and those that they practise the most will often become the skills they will master. Activities need to be varied to allow children to develop the practical skills needed to succeed, while also letting them enjoy the process and giving them the desire to repeat it throughout their lives.

The research design for the thesis necessitated a conceptual framework, a learning typology, so that the learning dispositions of the research group could be observed consistently. The details of this typology and its development are explained later in the Methodology chapter and exemplified in Appendix 4. From this typology a tool was developed for observing and assessing whether improvements to provision, adult-child interaction or any other factors not considered at the outset of the research could improve a child's disposition towards learning. The learning typology and the Child Learning Disposition Observation Tool (CLDOT), developed in the research, were integrally connected to the experiences, knowledge, observations and craft knowledge of the early years practitioners based at the setting. Staff craft knowledge in itself was informed by reading, discussion and training.

This research study included all aspects of children's behaviour during the learning experience. The Foundation Phase in Wales acknowledges and supports this integrated approach. It states 'All aspects of learning are interlinked for young children; they do not compartmentalise their learning and understanding into curriculum areas' (Welsh Assembly Government, 2008, p.5). The research questions were initially approached by focusing on

observation and understanding of learning behaviour before moving on to adaptation and change in activity for all parties in the research.

1:2 Young Children's Learning, Pedagogy and the Voice of the Child

The Foundation Phase in Wales has placed an emphasis on how young children learn. It raises the expectation that children's learning dispositions are considered in the learning environment (Welsh Assembly Government, 2008a). Wales has looked to Te Whāriki (1993), New Zealand's early childhood curriculum, to inform aspects of the Foundation Phase, and it therefore seems appropriate for this research to consider the same. Peters and Davis (2011, p.5) state 'Working theories and learning dispositions are key outcomes in the early years childhood curriculum in New Zealand.' They cite Perkins *et al.*, (2000) who propose that dispositions are concerned 'not only with what people can do, but how they tend to invest their capabilities – that is, what they are disposed to do,' (Perkins *et al.*, 2000, p.270). For me, this encompassed what is meant by the term 'disposition' and the holistic nature of the approach.

Learning disposition/style theories came to the forefront of learning theory in the 1970s as expounded by Dunn and Dunn (1978) and Kolb (1976). It is therefore, compared to many other theories such as those of Piaget's developmental stages of learning (1955) and Vygotsky's sociocultural approach to learning (1968), a relatively new body of knowledge. The term 'learning disposition' rather than 'learning style' has been used throughout this research. Reid (2005, p.4) suggests that 'it is crucial, to consider the process of learning as well as the product, and to give serious consideration to how children learn, and specifically, how they can learn more effectively.' Disposition in my research refers to the learning characteristics, attitudes and actions of young children as observed and explained by the early years practitioners involved with the children on a daily basis. For me, the term conveyed a holistic approach to children's attitude, action towards and thoughts about learning. This research did not directly use any of the previous learning style research methods, as these were mainly questionnaires and formal interviews used with an older research population, not appropriate for use in the early years.

In Finland, according to the Basic Education Act (Perusopetuslaki, 1998), one of the aims of pre-school education is to improve children's dispositions towards learning, (Hannikainen

and Rasku-Puttonen, 2010, p.148). It is this working definition that was used throughout this research. When introducing the Foundation Phase in 2007, Wales looked to the outdoor learning ethos of the Scandinavian countries enshrined in their kindergartens Skogsmulle, Skogsbornehaven and Frluftsliv (Knight, 2009, p.4). With new understanding and better practice on the part of the adult comes an improved opportunity for the child to understand his or her learning. Edwards (2005, p.67) cites Spodek and Saracho (2002) who propose that,

Early years curriculum and pedagogy should be shaped by theories of development and learning and these should logically inform the curricula practices of early childhood education primarily because children at this stage of the life cycle are acquiring the very cognitive and linguistic abilities necessary for the acquisition of content material.

Learning style theory, however, is consistently referred to by many education researchers and writers and has influenced government policy in learning in Wales and England. As recently as 2011, Fisher suggests 'Not that teaching would *follow* learning, but that it would optimise the preferred learning styles and strategies of the children being taught,' (Fisher, 2011, p.33). By adapting the strategy of exploring learning from the learner's perspective (what the learner does to learn) and basing the data on careful longitudinal observations, I believe that I have been able to negate Coffield's (2004) and Hargreaves' (2005) criticisms of learning style theory. I am confident that I have, in this research, been able to answer the third criticism concerning the practical application of the theories, since my research has been founded on practice and conducted in a working early years setting, whereas their works referred to older learners.

Within education, the term 'learning disposition' and 'learning style' in policy and writing has developed a different meaning. Here, learning style/disposition is something that humans can learn and it is subject to the outside influences of culture and environment. Carr and Claxton (2004) suggest the following by describing a child's learning disposition as a child's 'inclinations, sensitivities to occasion, and skills.' They put it as children being 'ready, willing and able to engage profitably with learning,' (Carr and Claxton, 2004, p.87). The term 'disposition' has been fixed firmly with the child and how he or she reacts to learning.

The term 'play' in the context of children's learning has been explored and studied by various researchers. McInnes *et al.*, (2011, p.121) suggest that 'Play is considered fundamental to early years development and education.' The Curriculum Guidance for the Foundation Stage

in England states ‘well-planned play, both inside and outside, is a key way in which young children learn with enjoyment and challenge.’ (Qualification and Curriculum Authority/Department for Education and Employment, 2000). Play has become a priority in Welsh educational policy not only for very young children, but for children throughout the primary age range. It is an integral part of the agenda for Welsh Assembly Policy on childcare, recreation and leisure for older children. Bae (2010, p.210) suggests that ‘play’ has an important role in how children can demonstrate active participation, self-expression and exercise their rights.

The definition of a child-led activity, as opposed to play, has previously been debated (Oli de Botton, 2010; Connor, 2011; and Chilvers, 2012). In these studies, play has been defined as an activity without adult outcomes. Many times this coincided with no adult being present at all in the play, although the adult may observe and value the play. Some early years practitioners would say that all beneficial and optimum learning for children should come from their own experiences, when the motivation for the child was inbuilt into the activity itself. Although Vygotsky, according to Donaldson, would have argued that:

‘Disciplined thinking’ and ‘conscious control’ is a worthwhile acquisition in itself. Control of a function is the counterpart of one’s consciousness and he saw consciousness and ‘deliberate mastery’ as the hallmark of all higher intellectual functions of the mind.

(Donaldson *et al.*, 1983, p.263)

Research by Wood and Attfield (2005) provided evidence that play, whether it was inside or outside, developed children’s content knowledge across the curriculum and enhanced the development of social skills, competences and children’s dispositions to learning. For these reasons it is considered to be an integral element of high-quality provision for young children (Siraj-Blatchford and Sylva, 2004) and the amount of time a teacher allocates to play gives ‘messages’ concerning its importance and value.

Tovey, cited in Jarvis and Broadhead (2010, p.20), says ‘Risky play is difficult to theorise but essential for well being. Children need opportunities to push themselves beyond boundaries in similar environments.’ Children have ample opportunity to experience risky play when outside and Knight (2010) reinforces for us the fundamental nature of risk-taking for humans. She goes on to remind us that it is the duty of early years professionals to develop in a

practical way this knowledge in young children, because it is through this knowledge that children develop the ability to keep themselves safe.

The physical environment inside and outside is particularly important in the early years because young children learn in a way that embraces interaction with their environment. In an early years setting, this often happens in the continuous provision areas where young children spend a considerable amount of the day. We aim, as staff at the Centre, to make the inside environment as attractive and interactive as possible. Displays include information about children's learning, the context of the learning and the value that is placed on their work. The displays help to inform others about young children's learning. I discuss later in this study how this work developed as a result of my research. Inside, children are generally free to choose the area they want to play in. Adults tend to follow the children's interest more in these areas than when they are engaged with adult-led activities.

The use of the outside as a learning environment has become even more important following the introduction of the Foundation Phase in Wales. The Welsh Assembly Government (2008, p.4) in its document, 'Framework for Children's Learning for 3 to 7 year olds,' clearly states 'The Foundation Phase environment should promote discovery and independence and a greater emphasis on using the outdoor environment as a resource for children's learning.' Since children are spending more time learning outside, it is more important than ever that teachers have a clear understanding of their role in that environment. Practitioners need to have the skill and ability to recognise and support children in working at their highest cognitive level both inside and outside, during play or when involved in an adult-structured activity.

The Effective Provision of Pre-School Education (EPPE) Project (Final Report, 2004) in England has highlighted many important aspects for early years practice. These have included the positive impact the qualifications of the early years practitioner can have on improving pedagogy and quality of learning of young children. It has shed light on the debate about the most favourable balance between adult-led and child-led activities, proposing that once this balance has been achieved, children have the optimum environment for learning.

The United Nations Convention on the Rights of the Child (1989, Article 12, p.4) was ratified in Wales in March 2011. The Convention states that:

Children have the right to say what they think should happen, when adults are making decisions that affect them, and to have their opinions taken into account.

This has raised the awareness of all those working with children and young adults, of their obligation to ensure that this group have a right to express a view about what happens to them, irrespective of how young they might be. Moss (2006a, p.14) writes that:

The child is understood as a competent citizen, an expert in her own life, having opinions that are worth listening to and having the right and competence to participate in collective decision-making.

The responsibility of the early years professional is to empower young children through choice, planning and the ownership of their learning. The idea of children's voice and the importance of children's play are key principles which inform this study. Harker (2002) (published by the National Children's Bureau Barnardos), wrote a 'highlight' paper considering the inclusion of children in social research. In this paper, she acknowledged, 'Children are increasingly perceived as competent social actors with valuable insights to offer on their experiences and interactions with the social world they inhabit,' (Harker, 2002, July). It was my intention that the children attending the Centre were important active participants in this research.

This research sought a way to enable children to influence, at source, how adults think about children's learning and their role within the learning process. This aspiration was specifically relevant and realised through RQ2 and RQ3. Bae (2010) suggests that there is a strong connection between the rights of the child and play. 'Many researchers have argued that play provides ample opportunities for active agency and self-expression,' (Bae, 2010, p.210). She then proposes that 'From the children's point of view, then, play and playful interactions might be considered a potent field for practising one's right to participation and freedom of expression,' (Bae, 2010, p.211). For me, this incorporated a different and important perspective to play. Bae (2010) proceeds to say that:

The rights of the child and how adults perceive this should be balanced with the knowledge that children generally learn within a social context. They, therefore, need to be able to function appropriately within a group that includes both peers and adults.
(Bae 2010, p.208)

This idea requires children to consider the needs and rights of others as well as their own within a group learning situation.

Teaching and learning involves two parties, the teacher and the learner, who both fulfil a different role in the process. The degree to which each actively contributes and participates changes depending on the individuals involved and the learning environment. Edwards *et al.*, (1998, p.67) state 'Always and everywhere children take an active role in the construction and acquisition of learning and understanding.' This research through the Learning Disposition Activities (LDAs) established a way for children to become actively involved in understanding, planning and reflecting on their own learning. The CLDOs enabled children to express their involvement in activities through action and facial and body expressions. The LDA cycle took this one stage further by asking children directly to express their thoughts and opinions on activities and the learning within those activities.

1:3 Reflection and the Change Process

Action research involves change. It is not something that happens in isolation – it is part of a process. A central aim for this research was to act as a catalyst for change within the research organisation because it was important that my research resulted in both short- and long-term benefits for the staff and the children attending the Centre. This type of change begins through reflection and the desire for improvement from those involved in the organisation. Biggs (1999) suggests that reflection is not enough. He says, 'a reflection in a mirror is an exact replica of what is in front of it. Reflection in professional practice however, gives back not what it is, but what *might* be, an improvement on the original,' (Biggs, 1999, p.6). This summarises the idea that, in education, reflecting on practice often requires action and that this action is often subject to further reflection and so a cyclical process develops.

The professional context of the research organisation was an environment where adults and children were already engaged in the learning process. Every organisation has its own internal structures, both formal and informal, and both require due regard before research moves into the change stage. The change culture of an organisation has the capacity to affect successful change (Fullan, 2001).

The research settings of Nursery School, Day Nursery and Flying Start had staff from a wide variety of educational backgrounds, at different developmental stages regarding their ability to adapt to change and face new challenges. This involved me, as researcher and Centre Manager, tailoring the introduction of changes to pedagogy in each of the settings. Each setting, to a degree, had its own culture. This culture sometimes reflected the age of the children, age and experience of staff, how staff were trained, or indeed the way the service area had evolved at the Centre. It was my intention to introduce the changes within the action research project firstly in the School, secondly in Flying Start and thirdly in the Day Nursery settings. According to Burnes (2004), the acceptance of change as part of the culture of an organisation can make the process of change more acceptable. 'There can be few people who now doubt the important role culture plays in the life of an organisation, especially when it comes to change,' (Burnes, 2004, p.300) This theory appears to be valid, as long as the change is worthwhile. It has been my experience through the many changes already undergone at the Centre that staff have accepted change that is planned, managed and effective.

In order for this research to be successful in practice, it was critical that I enabled others to share the vision. It was equally vital that staff become participants and joint owners in the research. This made it possible to plan and design the change as a collaborative process with colleagues. Implementation of the plan then became easier, with a greater chance of success. James and Connolly (2000, p.20) corroborate this by stating that, 'Action Research, especially collaborative action research, can be very powerful in achieving organisational change.' This is because organisations rely on its people and therefore organisational change requires the consent and support of all involved in that organisation to make it successful.

As this research progressed, change theory became enmeshed with theories about the reflective practitioner and reflexive practice. During the project I introduced the LDA cycle, and these activities facilitated the necessary change for completing the action research cycle. The process of change was promoted and sustained by:

- a continuous cycle of child observations
- changes to the learning environment
- a reflective cycle involving staff and children

Figure 1 shows the change process. The building blocks of children's voice, the learning environment and professional discussion created a base for reflecting on practice and developing the skills of the reflective practitioner.



Figure 1: Diagram of the Conceptual Framework involved in the Change Process

Bolton (2005) discusses the merits of debate, didactic discussion and dialogue in promoting reflective practice. Her preference is for dialogue because 'Participants in dialogue attempt to express what they think, feel and experience, in order to gain access to deeper understandings,' (Bolton, 2005, p.35). She continues by saying that reflection and dialogue can lead to 'Re-viewing of knowledge and experience [that] can lead practitioners to perceive a need for change in their world, their relation and attitude to it, and to the attitudes of others,' (Bolton, 2005, p.9). It was, I believe, through professional dialogue that change was initiated throughout this professional doctorate by both me and the staff at the Centre.

Early Years Centre staff are involved in professional dialogue on a daily basis. It is part of the ethos and practice at the Centre. This dialogue takes place between staff in the same setting, between different settings, with parents and other early years professionals. Sometimes the dialogue was about the sharing of knowledge and other times it involved reflecting on practice. Rarely, in the past, has the reflective dialogue involved the children. However, this research introduced a method through which children could become involved in the reflective process. It enabled staff to discuss objectively and focus on children's learning and their part in that process. The research has involved changing teachers' perceptions of learning and provided strategies to encourage the observation and development of positive learning dispositions. These strategies were tested in practice, results reflected on and further improvements suggested. This cyclical process continued over the two years of the research and after it had formally ended.

The Foundation Phase makes no distinction between curriculum and pedagogy, advising on both. This study sought to improve both at the Centre; such a change necessarily affected teaching strategies/activities and learning. It has been suggested that it is possible to distinguish between pedagogy and curriculum. This argument is complex as both areas are interrelated. Siraj-Blatchford and Wong (1999, p.8) define pedagogy as ‘the particular selection of educational practices and techniques that are applied to realise the curriculum.’ For the purposes of this research, pedagogy and curriculum were thought of as interconnected, with curriculum being part of the term ‘pedagogy’. The early years curriculum at the Centre closely links what is being taught to how and why it is being taught. These links are embedded because of the increased involvement of the children in planning their own learning experiences through the development of the LDAs and the consequent reflections.

1:4 Conclusion

The research undertaken was an important step for me both personally and professionally. Professionally, since I am the lead practitioner at the Centre and it is essential for me to be conversant with new early years developments. Personally, I have always believed that poverty in all its forms should not be a reason for the non achievement of children from disadvantaged backgrounds. This conviction was further entrenched when I read the work of Pugh (2010), who cites Feinstein *et al.*, (2007) suggesting that ‘More able children from poor homes are, by the time they are six years old, doing less well in reading and maths tests than less able children from well-off homes.’ I found this research both startling and motivating. It was important for me to help counteract this inequality and give the optimum learning context and experiences to the children at the Centre.

My research has involved balancing both theory and practice, and each of these has influenced the other as the research has progressed. Theory has informed practice and practitioners have helped to develop the theoretical framework that was needed to answer RQ1 and RQ2. Professional Doctorates by their nature are conducted in a real-life situations; mine has involved working with a wide variety of early years practitioners. To complete the research, I needed the financial and organisational support of my staff and my governing body.

This research study has involved balancing my professional role at the Centre and the role of researcher. The concept of insider research and how it may or may not impinge on the findings have been well debated (Cohen *et al.*, 2000; Coghlan, 2001; and Robson, 2002) and will be discussed in more detail in the Literature Review. This is an action research project and, as such, it followed the basic action research cycle of planning, action, monitoring and reflection. In summary, my work engaged with young children's learning dispositions and how learning style theories connect to this. It investigated children's metacognitive understanding and how this might be improved through the development of learning experiences. Children's voice was explored in the thesis through their ability not only to reflect on their learning but to influence what happens next and to take an active and central role in the research.

RQ3, together with one of the main aims of this action research project, involved instigating a process of change through the development of reflective practitioners and reflection on practice and early years pedagogy. Millar and Cable (2008) describe how reflection, research, challenge and change are connected:

Reflection associated with research, and action research in particular, can contribute to the process through which new ideas and practices are explored, beliefs are challenged and individuals and groups develop cooperative and collaborative working with and for children.

(Millar and Cable 2008, p.173)

Finally the theories critiqued in the next chapter, the Literature Review, particularly comment on learning and change theories and discuss how these have influenced this research. The literature further discusses child development and how this was central to my understanding of young children's learning. Theory regarding the learning environment, particularly the inside/outside and the differences and similarities between adult-led, child-led and play activities, and reflective practice is also examined in the Literature Review.

CHAPTER 2 Literature Review

2:1 Introduction

This chapter explores the ideas mentioned in the introductory chapter in more detail. It builds on my previous master's study in early years education and my practical knowledge of early years pedagogy. Sections of this chapter explore four main theoretical areas: learning disposition/style theories, current early years pedagogy, child development and theories about change and reflection. How the theme of reflection was applied is further discussed in the Methodology chapter and the Professional Development Portfolio. Much of the existing learning style/disposition literature related to research with older pupils. These theories gave the researcher a particular and professional insight into the children's behaviours during the research observations and they helped to inform any changes resulting from the research.

The selection of literature relates to my research and the research questions in the following ways: learning style theory, which influenced the analysis of the child observations, was used in the typology for the observation framework and informed some of the activity criteria in the Learning Disposition Activity (LDA) cycle. The LDAs are discussed in chapter three on methods, and mainly relate to RQ2 and RQ3. Child development theory provided the background necessary to understand the children, their behaviours, and predominantly informed RQ1. Finally, an understanding and knowledge of current early years pedagogy and theory about change in the workplace enabled the research to have a practical application and was mainly associated with RQ3. These strands were not exclusive and there were many examples of aspects of the literature enlightening the whole research and informing all research questions.

An understanding of child development was essential for this research to ensure that the observation and learning disposition criteria were appropriate for the age and stage of the research groups. It ensured that any proposed changes to activities or teaching strategies were apt and enriched the experiences of the children attending the Centre. I was interested in the broad developmental areas of children's intellectual, social, emotional and biological growth between two and four years, and how these interact with aspects of their learning dispositions. These have been chosen because they form the core growth areas for children in

the age group studied. By studying each developmental area, it was possible to develop a deeper understanding of the learning approaches, processes and capabilities of the children. The literature emphasises the importance of how adults understand and interact with children. Walsh *et al.*, (2010, p.64) suggest that practitioners need to:

Assume playful characteristics – for example, the tone is light-hearted, the activity becomes self-sustaining because both parties are enjoying it, and unexpected turns and directions are allowed.

Stephen (2009) believes that practitioners should work together with children, to develop activities that experience the process of learning. She addresses this view by saying:

Harnessing the power of mutual engagement and participation in personally meaningful tasks to support both children's disposition to learn and the development of specific skills and understanding is an area ready for research.
(Stephen, 2009, p.24)

This is opposed to the more traditional view of seeing the child as needing the support and guidance of the adult, who already knows where they are going. The literature emphasises the importance of making the learning process one of increased equality between adult and child where each makes a worthy contribution.

2:2 Learning Disposition/Style Theories

As stated in the introductory chapter, young children's learning dispositions, how they develop and understand their own learning, are crucial to their mastery of the learning process. I am aware that there are criticisms and much debate over the meaning of learning styles/dispositions and whether they can be applied in a constructive way to improve or help learning. However, according to Reid, identification of learning style is important because it gives children the opportunity to achieve a degree of independence and longevity in their learning, and this identification is essential to RQ1. He states, 'Knowledge of learning styles can equip all students for life-long learning,' (Reid, 2005, p.64). The more children know and understand about their own learning style, the more adept they become at managing and leading their learning independently, focusing on what interests them. The literature on learning styles has helped me to refine and define further my understanding of learning dispositions and what they mean in my research questions. In particular, when we talk about

a child's learning dispositions, we are referring to their attitudes to learning, the skills and approaches they use to learn and how they retain and recall their learning.

The British Educational Communications and Technology Agency review (2005, p.5), 'Learning Styles: an Introduction to the Research Literature', states that, according to Sadler-Smith research (2001), 'it may be that knowledge of learning styles makes students better able to adapt to different situations.' Ramsden (1983), again cited in BECTA (2005, p.5), makes a similar claim regarding learning strategies: 'students who are aware of a range of strategies are more likely to select the correct one for a particular task.' With the young age group in this research, it was essential for practitioners to be perceptive about the learning process, so that they could help children to understand their own learning.

Whitebread *et al.*, (2005, p.44) suggest that one of the most effective ways a teacher can promote the development of learning styles is to 'offer choices to the children, in offering opportunities for the child to control the level of challenge in tasks and opportunities for children to evaluate their own work and that of others.' These choices enable children to explore and develop the learning dispositions that will motivate and encourage them to become lifelong learners. With this in mind, including an element of choice later became one of the activity requirements in the LDAs, a tool developed to engage children in a variety of learning situations and planned as part of this research.

There are many interpretations of what exactly constitutes a learning approach, learning style or learning disposition. Some theories focus on the learning environment as vital to the learning process, such as Reid (2005). Others emphasise the importance of the social and emotional aspects of learning (Gardner, 2003; Goleman, 1995). There are other theories that concentrate on personality traits (Dunn and Dunn, 1978). These theories, together with those of Vermunt (1996) and Cullingford (2002), include different descriptors and categories of learning that range from three to seventy items. These studies worked with older pupils and, as such, much of the data originated from direct questioning of the learner. This approach was not viable in this research because the communication skills of the children involved were not sufficiently developed.

Children aged 24 to 48 months already have effective ways of learning and acquiring new skills such as a natural curiosity and enthusiasm to explore and play with new materials, or

the ability to absorb new information. They are becoming capable of understanding for themselves the process of learning and their part in it. Bailey (2002) suggested that this skill of learning how to learn ‘develops as a result of the social and cultural environment, as well as some innate ability,’ (Bailey, 2002, p.167). This theory connects to the nature/nurture debate and whether children are born with their intelligence set or not, and how much of it can be influenced by their social, cultural and learning experiences. My understanding gives credence to both views and I have found that the advantages of both are amplified because innate ability and a positive social, cultural and learning environment often coincide. Although I agree with Greenfield (2012), the ‘right’ environment for any child can overcome disadvantage. I was able to use this knowledge to clarify the social interactions within the Child Learning Disposition Observations (CLDOs), especially with the oldest group of children taking part in the research.

Goswami and Bryant (2007, p.8) suggest that ‘the ways in which teachers and parents interact with children influences the episodic memory.’ They exemplify this by citing (Reese *et al.*, 1993), who state ‘Parents or carers who have an ‘elaborative’ conversational style have children with more organised and detailed memories.’ Memory is an important part of the learning process for young children who are learning to connect early experiences to new situations. The ‘practised learner’ was described in this research as someone who was able to explain and talk about their learning. These children were starting to be able to think, and answer questions about the own learning processes. Goswami and Bryant (2007, p.14) conclude that ‘Gaining reflective awareness of one’s own cognition is a major achievement of the primary years,’ and this whole area became fundamental to answering RQ3.

The Welsh Assembly Government (2008a, p.10) has stated that ‘individual children have different learning styles or preferred ways of interacting with the environment.’ It adopted this theory and terminology from Fleming’s research (2001) and Gardner’s (2003) Multiple Intelligence theory. These specifically refer to the visual, auditory and kinaesthetic learner, who favour sight, hearing or a practical task to facilitate learning respectively. The Welsh Assembly Government take this a stage further by saying:

For children’s learning to be most effective the learning experiences need to be meaningful for the children. Opportunities should always be given for them to make choices according to their preferred style of learning, or to choose through a combination of learning styles.

(Welsh Assembly Government, 2008, p.10)

Most of the learning at the Centre is visual, auditory and kinaesthetic because of the environment and the nature of young children's learning that cannot be partitioned into convenient sections. This research has helped to give children's learning within the Centre a different set of descriptions and characteristics. It is both difficult, and potentially dangerous, to label a child's learning exclusively based on a learning style theories, as categorising a child early on can negatively influence a child's learning potential. Reid (2005) suggests that learning style theories lack long-term reliability because some children change and use different styles for different learning situations. It is essential, therefore, that research in this field be flexible. One of the advantages, at the Centre, of exploring our own learning descriptors has been our deep knowledge of the learning characteristics and our ability to regularly review the children and their progress, adjusting their learning category accordingly.

It is helpful for the individual involved in learning to know the language of learning and to begin to develop an understanding of how they learn. Research advocates that some aspects of learning strategies can be taught, regardless of natural inclination. However, the ability to learn – especially of our youngest children – can fluctuate according, for example, to their well being or the learning environment, because their ability to control and manage their own feelings is still developing.

Although the simplicity of assuming that everyone has a permanent, in-built learning style is appealing, there is little evidence to support this. The lack of longitudinal studies makes it impossible to be certain how stable learning styles are. There is the further problem of the reliability of the instruments used to test learning styles – even if learning styles are stable, many of the instruments cannot be relied on to give consistent results from one test to the next.

(British Educational Communications and Technology Agency, 2005, p.2)

Carr and Glaxton (2004, p.22) describe and use the term 'learning dispositions' in the sense of 'responsive and reciprocal relationships between the individual and the environment.' Environment in this research includes the physical environment and the adults and peers in it. Carr and Glaxton further suggest five domains of learning dispositions: taking an interest; being involved; persisting with difficulty or uncertainty; communicating with others; and taking responsibility, similar to the 'Habits of Mind' that Costa and Kallick (2000) describe as tendencies to respond to situations in certain ways. Daniels and Edwards (2004, p.30) draw on Katz's (1998) statement that 'dispositions are a very different type of learning from

skills and knowledge.’ Some of these domains or habits informed the learning characteristics used in the Child Learning Disposition Observation Tool (CLDOT) developed in this study.

These statements are relevant and important to this research, because it focused on children, aged between two and four, for whom the acquisition of learning skills, knowledge and self motivation is an integral part of the learning process. Pedagogy in the early years is dominated by the ‘how’ of learning, with the acquisition of knowledge, in my opinion, and ‘informed by experience’ taking a second place. As children get older, the curriculum becomes more subjected to the acquisition of knowledge and skills.

Reid (2005) suggests that each person has their own learning style and approach to learning. He proposes that the role of the environment is less important than the individual’s cognitive ability and advocates that educators provide differentiation for individual children according to their abilities. This can cause difficulties for the practitioner, who sometimes has to balance meeting the individual needs of the child with meeting the needs of all children within small and large groups. This is particularly pertinent to this study because the practitioners and children involved were often coping with this exact situation. The observations for this research were completed in an ordinary, normal working education environment, with all the distractions that this entails. One of the aims of this study was to make improvements to pedagogy at the research setting. In order for this to be successful in practice, it was necessary to meet the needs of individual children in a large group and respond sensitively to the adults at the Centre.

Researchers often connect the cognitive ability of individuals to their environment. Goswami and Bryant (2007, p.19), referring to Plomin and Spinath (2002), state that:

The strong heritability of intelligence is now accepted, but the emphasis in research is on the key role of the environment for explaining variability.

They are referring to a child’s social and cultural environment here rather than to specific individuals in that environment. This research focuses on early years practitioners as an important part of a child’s environment and, as such, they have an important influence on how children perceive their own intelligence. Goswami and Bryant (2007, p.19) further cite Dweck (2000), who asserts that ‘children’s beliefs about intelligence can be altered by feedback from teachers, who should try and praise effort rather than performance.’ In this research study, practitioners encouraged children to make choices about their own learning

and to give them feedback by becoming positively involved and enthusiastic about those choices. The practitioner is encouraged to value children's efforts and their learning journey rather than always focusing on an outcome. RQ3 required adults to put this approach into practice. This is based on the notion of trust: that the adult perceives children as being able to make such important decisions.

There are various ways of assessing intelligence and the method chosen impacts on the perceived level of intelligence. Greenfield (2002, p. 21) mentions the 'distinction that can be drawn between 'crystallised' intelligence and the intelligence to be able to learn something quickly and adapt quickly.' It is true that the content of what is being learnt can affect an individual's ability to learn. Reid (2005) mentions that specific styles are more effective for certain types of learning. Importantly, as far as this research is concerned, Reid believes that 'learning styles in the classroom can help teachers deal with many of the challenges they face in inclusive schools,' (Reid, 2005, p.52). This is important because my study focuses on how early years practitioners can use their knowledge about children's learning dispositions to improve the learning experiences for all children, including those with additional learning needs.

Reid (2005, p.52-53) states that there are over one hundred instruments designed to identify individual learning styles. These can be categorised under the following headings: personality types, environmental factors, cognitive styles and metacognitive influences. A learner's culture, the classroom climate, dynamics and environment, teaching style, curriculum and teachers'/parents' expectations all affect the learning styles of each individual. It is also possible for the learning style of the individual to influence the above. He further proposes that this process is constantly evolving over time: 'Learning is a fluid process and learners and teachers can accommodate to one another, to a certain extent, throughout the learning process,' (Reid, 2005, p.53).

Mainly using student self-completed questionnaires for data collection, Dunn and Dunn's research (1978), although completed over 30 years ago with Higher Education students, had five learning domains that still have relevance today: environmental, emotional, sociological, physiological and psychological. Each one of these domains had 12 sentence descriptors and students identified the sentence that best described their learning. Dunn and Dunn proposed that an individual's learning styles remain relatively fixed and are pre-determined. There are

only certain descriptors open to the influence of the school and their social environment. Although undertaken with young adults, these five domains were pertinent and applicable to this research. However, the suggestion that learning styles were fixed for these young adults was not supported when the children involved in this research changed learning dispositions as they tackled new tasks; the reasons for this are discussed in later chapters.

Coffield *et al.*, (2004) studied over 70 learning style theories and categorised 13 major models, each of which contained at least two learning characteristics. During this time, they discovered no evidence that matching instruction to an individual's sensory or perceptual strengths and weaknesses was any more effective than designing content-appropriate forms of presentation and response. Although critical of learning style research as a means of leading teaching strategies, Coffield *et al.*, agree that it does have relevance for the subject matter being taught and that learning methods are often relevant for the individual whatever the age of the learner. The present research study assessed the possibility of changing the quality and content of teaching so that children could improve their dispositions to learning. Generally, in the early years, learning is not presented to young children as a discrete package of content but can take the form of an interaction between child and adult, or child and child. Interaction in the early years may well focus on enabling a child to experience learning.

Cullingford (2002) carried out research into the learning styles of teenagers: this research has resonance with early years children despite the age difference. For example, young children often have interests and behaviours that are contradictory to the expectations placed on them in early years settings. This is often also true of the teenager in a learning situation. A further connection between the work of Cullingford and this research is his emphasis on the importance of friendship and learning to the teenagers in his study. The formation of friendships is also vital to a young child's successful transition from home to school and within school. Peters' (2003, p.45-53) research into friendship in the early years confirms that young children are motivated by friendship, that it gives them the social context for learning and encourages their development as social beings.

Cullingford suggested that teenagers preferred to work in groups as a strategy for learning without the close supervision of the teacher; that discussions and opinions were associated with real learning; and collaboration was seen as beneficial by the learner. Cullingford's research established that teenagers believed learning from your peers and 'having a sense of

collective wisdom and shared endeavour takes some of the pressure off having to ‘work things out’ individually,’ (Cullingford, 2002, p.6). Early years research by Siraj-Blatchford and Sylva (2004, p.718) has also documented the benefits of learning together. They speak of ‘sustained shared thinking,’ where adults and children work together ‘to solve a problem, clarify a concept, evaluate activities or extend narrative’ to produce the best results for children.

Teenage pupils considered one of the best learning strategies to be the use of a variety of approaches and attention to individual need by the teacher and the pupil. Cullingford (2002, p.8) suggests, ‘Learning styles will not just vary between pupils but within them.’ Similarly, a good early years environment including both the physical environment and pedagogic approach gives young children the freedom and the opportunity to engage in a task in a variety of ways. This enables children and adults to choose the best approach possible for the individual. However, according to Siraj-Blatchford and Sylva (2010, p.22), ‘discussions about how and when to scaffold, and what kinds of adult actions and interactions move children to new understandings and competences with the tools of their society, are less common.’ I was able to draw on these ideas when questioning and relating to some of the observations gathered in response to RQ1 and RQ2.

Edwards *et al.*, (1998, p.66) refer to one of the guiding principles of the ‘Reggio Emilia’ schools in Italy when they write ‘relationships and learning coincide within an active process of education.’ This active approach to learning places it very much within the social context of education and care settings. The authors further explain that, during the learning process, schools have responsibilities for enabling children to acquire the skills they need to understand their own learning (metacognition), as well as the tools to be able to acquire knowledge and to learn in a variety of situations. Edwards *et al.*, (1998, p.119) confirm this by arguing: ‘An important aim of our schools is to sustain the social learning process and to help children learn how to learn,’ particularly in the early years.

Using a variety of approaches for teaching and learning is common in the setting where the present study takes place. This research study provided the opportunity for individual children’s preferences for learning to influence the planning, delivery and organisation of pedagogy. However, it was important when putting their ideas and plans into action that the learning needs of all children were considered and that one child’s learning preferences did

not dominate pedagogy. If learning styles are not fixed for the child, the emphasis moves from accommodating learning styles to encouraging a balanced approach to learning and, perhaps more importantly, an explicit awareness of the range of approaches available to the learner. Even amongst those who question the validity of learning dispositions as a concept, most agree that there is a benefit in enabling learners to reflect on how they learn.

As previously stated, one of the main thrusts of the Early Years Foundation Phase in Wales has been to improve the adult to child ratio in early years so that the needs of individual children can be better met. Recent research in England questions the effective use of the support of extra adults in the classroom and the impact this has on children's learning, (Siraj Blatchford, P. *et al.*, 2009). The present study emphasised the need for appropriate use of extra adults in any setting so that they enhance and add to the learning of the children. All Centre staff, both teaching and non teaching, were involved in the development and implementation of the research and the effect on learning of the use of adult to child ratios was improved.

While there is strong evidence for the existence of learning styles and dispositions, what they mean for teaching is less clear, particularly in terms of matching instruction to cognitive style. There is, however, some evidence (Riding and Watts, 1997, cited in Reid, 2005) that matching learning materials to a student's cognitive style improves both performance and satisfaction. Some authors argue that mismatching materials and learning styles is beneficial, and this has been found to help older students develop a more balanced approach. According to a study by Riding and Rayner (1998) for older children, it may be that matching learning styles and teaching is most beneficial for lower-ability students, particularly when presenting difficult material, while higher-ability students benefit more from mismatching, as it allows them to develop new approaches to learning. The effects of matching and mismatching seem to be dependent on context and are certainly far from simple; outcomes differ according to the subject matter and intended learning outcomes (for instance conceptual knowledge versus practical performance. This would relate to the early years because one of the aims of the early years professional is to help children to experience and explore new ways of learning as well as reinforce those methods already established for the individual.

Reid (2005), in particular, suggested that it may be more appropriate to think in terms of accommodating rather than matching a range of modalities and styles. Offering learners a variety of ways of engaging with content seems to be beneficial in terms of both outcome and motivation. Moreno and Mayer (1999) found that mixed modality (visual/auditory) presentations were the most effective. Jaspers (1994) argued that designing instructional materials to cater for a dominant modality is practically difficult and theoretically unsound.

Coffield *et al.*, (2004) question the quality of some learning style research and suggest that, in the Further Education context, some of the claims that using learning style research practically in the classroom has had a great impact on teaching and learning have not been supported in the research findings. They say:

The review of evidence of the impact of learning styles on teaching and learning ... [reveal] there are very few robust studies that offer ... reliable and valid evidence and clear implications for practice based on empirical findings.

(Coffield *et al.*, 2004, p.1).

The purpose of the present study was not to identify learning dispositions in isolation but to use this information about learning dispositions to give children an increased range of approaches and tools to learn, enabling them to understand and use more effectively the ones they have. As already discussed, there are many contradictions and inconsistencies between learning theories. One of the reasons for this lack of clarity is because, when we speak about teaching and learning, we are actually talking about relationships and interactions that are both complex and changeable. How the learner learns is only one factor amongst many others in the teaching and learning situation, and that factor itself changes with the individual and their mood. Coffield *et al.*, (2004) discovered the lack of reliability in some of the learning style instruments. They proposed that the learning culture, classroom and school climate, dynamics and environment all influence learning styles.

Despite ambiguity and uncertainty, Reid proposes that there are enough points of commonality and agreement in learning style theory to make the study of styles worthwhile.

He suggests the common factors to all the learning style theories are:

Learning is a process; it requires a period of consolidation; it is more effective when the content is familiar; using the material in different contexts and over time enhances the chances of retention and understanding; intrinsic as well as extrinsic factors can influence learning and that learning is life-long.

(Reid, 2005, p.5)

RQ1 and RQ2 focused on children and the learning process the literature studied in this section has helped me understand the complex issues involved in defining the term ‘learning dispositions’ and what it actually means for my research. I have identified important aspects of and common features involved in learning, whatever the age of the learner. This information has been tempered with an awareness of the criticisms over learning style research and how to prevent these from discrediting my own research.

2:3 Cognitive and Psychological Theories

The theories studied here have been chosen because they have influenced pedagogy and practice in the Early Years Centre that is the subject of this research. They have been drawn from a range of perspectives including psychology, education and neuroscience and each has contributed to the theoretical background for this research. The design of this research has enabled these theories to have a practical application.

Theories about how children learn can be divided into three main areas: children’s attitudes to learning, the skills they use when they are learning and the preferences they show for the way they are taught. The study is concerned with all three aspects. When young children start in a setting, they bring with them their previous experiences and learning. The National Research Council (2001, p.185) supports the premise that, ‘Learning is not the transfer of new information into an empty receptacle; it is the building of new understandings by the child on the foundation of existing understandings.’ Children and their learning behaviours are the result of an accumulation of experiences. The present research study categorised learning behaviours and identified a framework for observing the learning of individual children, so that their learning developmental needs were met within a group setting.

Gardner’s (2003) theory about Multiple Intelligences suggests that children use as many and as varied learning styles as an activity requires:

Children may well exhibit one style with one kind of information (such as being impulsive in the musical realm) while exhibiting a contrasting style with other information (such as being reflective when working on a jigsaw puzzle).
(Gardner, 2003, p.43)

He further suggests that this ability to adjust behaviour also applies to a child’s preparations for learning:

... the way a child interacts with the materials of a content area, such as ability to plan an activity and to reflect on a task, and a level of persistence. While some individuals exhibit working styles that determine their approach to any task, no matter what the content area, others have styles that are much more domain-specific.

(Gardner, 2003, p.89)

Greenfield (2012, p.23), however, argues that 'The concept of multiple intelligences is not confirmed by neuroscience.' Recent brain research proposes that early synapse development is interconnected and each synapse has the possibility of connecting to the many other and varied parts of the brain (Greenfield 2012). More recently, Gardner (2010) has proposed the theory of 'five minds' where individuals ideally develop a level of mastery over five areas: disciplined, synthesising, ethical, creative and respectful minds. Development of all begins at the earliest stages of children's lives.

Goleman (1995) and his model of emotional intelligences focuses on the growing child's self-awareness, their knowledge of their own mental processes and how they can channel and regulate these processes. Goleman further suggests that this self-knowledge affects a child's ability to learn and that a positive self-image will constructively influence the process. This procedure is cyclical because the more positive learning experiences we have, the more positive image we have of ourselves as learners.

According to Goleman (1995) there is also a close connection between a child's emotional development and their ability to learn. He says 'emotional literacy programs improve children's academic achievement scores and school performance,' (Goleman, 1995, p.284). In Stephen's view (2009, p.22), 'the emotional and social aspects of pedagogical interactions are made evident particularly in their contribution to developing positive learning dispositions.'

Developments in social understanding and meaning, emotional and independence skills are as important to a child's cognitive growth as any physical developments and an understanding of them can inform and help an adult facilitate a child's learning. Goleman's theory (1995) regarding emotional development focuses on the connection between children's social, emotional and cognitive development. He emphasises the importance of security, confidence and self-esteem to the learning process. Goleman (1995, p.274) says 'The kindergarten years

mark a peak ripening of the ‘social emotions’ – feelings such as security and humility, jealousy and envy, pride and confidence all of which require the capacity of comparing one with others.’ I have drawn on the theories of Gardner (2010) and Goleman (1995), especially the latter’s emotional development work when observing the children and collecting the data for RQ1 and RQ2.

The four-year-old children in this study are already beginning to understand the complexities of human behaviour and to understand that others may act or think quite differently from themselves. A child aged two to four is progressing from needing to see or experience something practically to know about it, to understanding that it is possible to know about something without seeing or experiencing it. The younger age group in the study required first-hand experiences and, although this need continues after the age of four, children aged two to four are starting to use words like ‘know’ and ‘think’. These words express the fact that children are beginning to appreciate they have ‘minds’ and ‘thoughts’ of their own.

McDowell *et al.*, (2012, p.232), remind us that:

Interaction with others not only generates restructuring of the brain and supports a baby’s developing ‘theory of mind’ but also supports their communicative abilities through co-regulation between babies and their adult caregivers.

The theory of mind is a particularly complex one and involves children in subtle thought and understanding. Goswami and Bryant (2007, p.2) suggest that ‘Developing a theory of mind requires an understanding of the mental states of others.’ Harris (1989) proposes that there are three important precursors, or pre-conditions, for the child to understand that they and others have a mind. These are self-awareness (18 to 20 months), the capacity for pretence (2 to 7 years) and the ability to distinguish reality from pretence (3 to 4 years). At three years, he suggests, a child understands that other people may think differently from themselves.

By the age of four, children begin to appreciate that different people might know different things about the same object or have different perspectives on the same event. Bailey (2002, p.166) remarks ‘How on earth can young children master such abstract concepts as beliefs (and false beliefs) with such ease, and at roughly the same time the world over.’ This question was important to this research because it also helped me to appreciate how children might react differently to the same activity or stimulus, depending on their stage of development.

Cognitive developmental psychology is a field of psychology that focuses on *how* children learn. Whitebread *et al.*, (2005, p.42) argue that this aspect of the learning process is 'crucially responsible for individual differences in children's development as learners. The better a child understands his/her own learning processes, the more able and lifelong learners they become.' Encouraging metacognition (being aware of and understanding one's own thought and learning processes) is an important advantage gained from developing an understanding of learning theory.

The understanding of metacognition, developing the ability to reflect on our own processes of learning and our feelings about ourselves as learners, has become a learning theory in itself. Whitebread *et al.*, (2005, p.43) state,

Some writers argued that it (metacognition) is a late developing capacity. However, this very quickly became an untenable position, once the emphasis switched from metacognitive knowledge to metacognitive experience.

Metacognitive experience is accessible to young children, whereas metacognitive knowledge often requires a level of expressive language that is not attainable by the young child. Whitebread's assertion (2007) that children can acquire metacognitive experience as opposed to metacognitive knowledge has influenced the questions asked of the children in the research study. The type of question was influenced by the knowledge that children of this age are beginning to understand metacognitive experiences. The questions also focused on getting children to re-live their learning experiences rather than simply trying to remember what they did. The growing body of knowledge about metacognition has also contributed to the thinking and analysis of the data throughout the study. The understanding of what metacognitive experience means for young children has been explored with staff during the research because this was an area of early years knowledge that had not previously been discussed by staff in any depth. This exploration included asking children, who are able to express themselves verbally, about their learning, analysing this information and then using it to improve practitioner-child interaction.

As already discussed, the children in this study were experiencing significant advances in their intellectual and emotional development. It was important for this research that I be aware of when young children are able to understand certain concepts and ideas. I considered the work of Piaget, especially his stages of learning, when constructing the study research design. Piaget (1954) focused on children's cognitive growth and considered intellectual

development to be a continuous process of assimilation and accommodation. Smith (1992) and others have questioned and criticised some of the results of Piaget's early experiments. Goswami and Bryant (2007, p.7) conclude that:

Piaget's related notion of stage-based change that children think and reason in different ways according to their stage of cognitive development has been undermined. Nevertheless, his idea that action (physical interaction) with the world is a critical part of knowledge construction has been supported.

I decided that it was important to reflect on Piaget's stages of development when observing young children because my research particularly focused on children's actions. This decision was made as a result of considering the criticisms, studying the work itself and my own experiences with this age group. In the children participating in this research, I observed some of the characteristics that Piaget described in his developmental stages, such as: the beginnings of their transition from needing physical experiences to the ability to 'think' things out, or their growing ability to move from the literal to the more abstract, or the way their world is opening up socially for them.

Children at the age in this study are able to classify objects and are beginning to make sense of relationships, although their thinking is still egocentric (Mussen, 1983). Piaget suggested that children of this age only concentrate on one aspect of a task at a time. Children who are concentrating, playing and learning are often exposed to many distractions and points of interest. In fact, in contradiction to Piaget's theory, at the Early Years Centre, children have been observed to be doing something whilst thinking and talking about something else. It is the level of concentration that often decides whether a child can cope with more than one thing at a time. This was an important feature for the CLDOs in this research because I was recording the intensity of concentration shown by the children on a particular task.

Piaget (1954) and Vygotsky (1968) proposed that children learn best when learning with their peers. Vygotsky's (1968) believed that humans need to engage with other humans in order to develop the high order thinking that differentiates them from other forms of life. The influence of peer interaction on a child's learning is well documented (Piaget, 1955; Vygotsky, 1978; Light and Littleton, 2010). Communication and language are vital to this process. Part of the learning process in the education and care settings at the Centre is one that encourages learning and interaction between the adult, the child and the latter's peers. The adult will often adjust this interaction to suit different children even if the actual play or

activity has the same broad context and content. Wood, (2007) cited in Walsh *et al.*, (2010, p.58) emphasised that ‘it was necessary to develop a pedagogy of play that respects the ideological tradition, and provides a theoretically rigorous underpinning for creating unity between playing, learning and teaching.’ Vygotsky suggested that what children can do with the assistance and social interaction of others is a more accurate indication of their intellectual development than what they can do alone. He (1978) added to his theory on social learning by advocating the advantages of mixed-age learning. This type of interaction benefits the older child who clarifies and reinforces his or her own learning by explaining it to another, younger, child. Generally, early years settings are organised into age groups, giving little opportunity for this type of collaborative ‘family group’ learning.

Vygotsky (1978) also emphasised the importance of collaboration and conflict as a source of cognitive development. He later refined this theory to emphasise that it was not conflict on its own that led to a child’s social and emotional development, but the resolution of that conflict. It is necessary to understand that, before resolution, there has to be conflict. This, for some children, can be a distressing situation, in which they find it impossible to learn. Rinaldi, who commented on the learning value found in the resolution of conflicts for young children, says that:

Conflicts and the recognition of differences are essential, in our view. Conflict transforms the relationship a child has with peers – opposition, negotiation, listening to others’ points of view and deciding whether or not to adopt it, and reformulating an initial premise – are part of the process of assimilation and accommodation into the group.

(Rinaldi, cited in Edwards *et al.*, 1998, p.115).

Rinaldi is President of the Reggio Emilia schools in Italy, and many qualities of the education there have influenced the Foundation Phase in Wales. This theory has particularly influenced the Centre’s behaviour policy in the way we manage and react to negative behaviours. The acceptance of conflict and the way Centre staff encourage children to negotiate and discuss with others the reasons behind their behaviour is at the heart of the Centre’s behaviour policy.

A further aspect in the learning of children aged two to four years has been discussed by the National Research Council (2001, p.185), which considered the long-term connection between learning and reward that sometimes exists. Children of the age in this study are only just beginning to appreciate that learning, not based on immediate needs, is an enjoyable and worthwhile activity in itself. Bodrova and Leong (2008, p.1) state that, ‘Self-regulation is a

deep, internal mechanism that enables children as well as adults to engage in mindful, intentional, and thoughtful behaviours.’ They further suggest that self-regulation involves two parts: not doing something when you want to and, alternatively, doing something when you do not want to do it. These two characteristics are important to learning and vital to the success of learning in a group situation.

The concept of delayed gratification is a prerequisite for the lifelong learner. It is easy to underestimate how often the lack of immediate reward can possibly have a negative effect on some children’s motivation to learn. For this reason, some early years practitioners would say that all beneficial and optimum learning for children should come from their own experiences. The motivation for the child is built into the activity itself, although, according to Donaldson *et al.*, (1983, p.263) Vygotsky (1978) would argue that:

Disciplined thinking’ and ‘conscious control’ is a worthwhile acquisition in itself. Control of a function is the counterpart of one’s consciousness and he [Vygotsky] saw consciousness and ‘deliberate mastery’ as the hallmark of all higher intellectual functions of the mind.

By the age of four, children are able to classify objects, make relationships, understand person and object permanence. They are beginning to learn and do things that are not mainly motivated by physical need or want, but by curiosity and self-motivation. The beginnings of delayed gratification occur. In the late 1960s, Mischel set up the Stanford Marshmallow Test. This investigated whether four year olds were capable of deferring a reward. The ability to motivate oneself to work towards a goal with no immediate gratification is often vital to learning. Children who have not yet developed this ability will find it difficult to participate in the learning processes of school. They need to know what the outcome of their learning experiences will be and whether they will benefit from such experiences. I drew upon this knowledge when discussing with staff the type of information that should be shared with children, when the opportunity arises, about the learning process. This procedure was used in part to answer RQ3.

The cognitive and psychological theories about learning provided the necessary theoretical background for the research questions, particularly as children and their learning was central to each question. The theories helped me to understand the children’s learning behaviours and to ensure that any changes made as a result of this study were appropriate for the children involved and related to research.

2:4 Childhood Development and Play

Knowledge of how young children develop and grow and the rate of that development are vital to any professional working in the early years. Ashley (2003), cited in Dixon (2005, p. 10), would argue that this is not always the case in practice. 'The notion of child development has all but disappeared from our teaching: as if, in curriculum terms, a six year old is simply a sixteen year old, who has not lived quite so long.'

It was important for me to be aware of children's physical capabilities and what could be expected of them so that any changes made to the teaching and learning at the Centre were physically within the capabilities of the children. By the age of two, most children are able to move around independently. They are physically growing and becoming stronger and they can walk with balance and purpose. They are growing taller and nearly all are able to meet their basic needs. Young children are gaining control over their gross and fine motor movements. The development of each of these is closely connected and has an effect on the other. The progress of most young children in these areas tends to happen intuitively and naturally, requiring only opportunity and experience.

Children are becoming capable of exploring beyond their immediate environment and they enthusiastically enjoy this new independence. Large physical movement is about running, balancing, climbing steps using one foot after another and jumping. Children are beginning to understand the idea of personal space and they become more adept at steering their bodies around people and objects. Small fine motor movements include learning to coordinate eye, arm and hand movement and developing a strong pincer grip. Please see Appendix 1 for examples of a child's expected physical developmental profile. These draw on work by Sheridan (2004), The Welsh Assembly Government (2009), Meggitt (2006) and Surestart (2002).

In its document 'Learning and Teaching Pedagogy', the Welsh Assembly Government (2008a, p.10) connects the physical development of the brain to children's learning styles. This is supported by research. Synapse connections rapidly increase and strengthen in early childhood. Viadero (1996, p.31) says 'Parents, educators, the babies' early experiences – all these factors will determine which neurons connect and which connections will eventually wither and die from lack of use.' Bruer (1999) suggests that synapse density peaks in the

frontal cortex between two and a half and three years of age. He warns that we should not automatically connect more synapse connection with more intelligence or brainpower. He further advises:

... the developmental accumulation of synapses [i.e., the phase of early rapid increases in synaptic density] is altered much less by environment stimulation than has been appreciated or would be expected by conventional wisdom.

(Bruer, 1999, p.89).

This theory is contentious and directly contradicts the theory that the more synapse connections made in childhood, the more able we are to make the necessary connections between our experiences later. Moreover, there are commercial developmental stimulation programmes designed for young babies that aim to enrich their environment and thus increase stimulation in the hope that this will increase a child's intellectual potential (Matthews, 2011, pp1-3). Blakemore (2002) suggests that the results of scientific research so far do not support this theory and the effectiveness of these programmes:

The claim that babies should be exposed to all sorts of learning experiences during the first three years of life might not be valid, because it assumes that human brains develop in the same way and at the same time as animal brains.

(Blakemore 2002, p.27)

His synapse theory (2002) suggests that it is possible to over-stimulate children, offering no benefit to them in the long term. This, together with the theories on delayed gratification, has consequences for the methodology, outcomes and actions of this research. Delayed gratification helped us, as a staff, to ask whether the activities we were asking children to complete had obvious and immediate reward for them. It again made us think about play and how this is intrinsically rewarding for children. The possibility of providing over-stimulation prompted us to consider the balance between new and challenging activities, with the need for children to have time to assimilate and adapt what they already know.

Greenfield (2002, p.21) says 'The first two years are very big in the human brain development, and there are precise spurts and phases that it goes in.' Bruer (1999) argues that the theory of critical periods in brain development is based on research into the developing human visual system. He agrees that these periods may well occur in human sight development, but he warns against applying this to all brain development. Bruer (1999, p.103) explains, 'Most learning is not subject to critical period constraints, not confined to windows of opportunity that slam shut.' He further advocates that the work of neuroscientists may have greater impact not on the question of when children learn, but *how*

they learn and how learning affects the physical and chemical development of the brain, (Bruer, 1999, p.142).

Bowlby (1951) asserted that there is clear indication that the consequence of our early relationships has a profound effect on our later emotional, social and cognitive abilities. In 1988 Bowlby became famous for his 'Attachment Theory'. This theory in part relied on Piaget's work regarding young children's understanding of object permanence. When a young child's parent leaves them for the first time, does the child think the adult has permanently gone? This particular aspect of Piaget's work has been questioned: Frost (2008, p.1) accepts that 'the understanding of mental representation has advanced since Bowlby's day that present views can be far more specific. It is also true, however, that young children who are upset, often because of leaving their main carer (whether the child's natural parent or not), do not apply themselves to learning opportunities available at the Centre.

The whole concept of attachment and its effect on learning is relevant to this study because of the age of the children, and the fact that many of them will have recently experienced leaving their main carer for the first time. The key worker system used at the Centre and throughout Wales was founded on Bowlby's Attachment Theory (1973). In this system, every new child to a setting is allocated a key member of staff who provides the main link between the child, their carer and the setting. The key worker is also often responsible for the child's overall well-being and development. Elfer (2012, p.129-130) cites many other examples, saying 'The importance of attachment interactions has been given progressive emphasis in the last 20 years most recently as statutory requirement,' (DfES 2007; DoE 2011).

Recchia (2012, p.143) again emphasises the importance of the relationship between the child and their carer:

Child development experts agree that the best practice in infant and toddler care-giving requires a strong focus on building positive and trusting relationships, and that this relationship-focused care-giving should have as its goal the development of secure attachments between children and their caregivers.

Bowlby's theory of attachment is the basis of the Nurture Group work expounded by Benethan and Boxall (1998). The Nurture Group provision has been established and used to provide effective support for particular children at the Centre. The Nurture Group provides

children with ‘the opportunity to experience those missed nurturing episodes by creating a setting conducive to early developmental learning,’ Bennathan and Boxall (1998, p.4).

One of the main criticisms of Bowlby has been that it is neither possible nor desirable to transfer the principles of his theory from the home into a care-giving environment (Dahlberg, Moss and Pence, 2007; Lee, 2006). Elfer (2012) explored the relationship between the caregiver and the child from the parents’ perspective and says that:

(These) include anxiety about the appropriateness of attachments in professional work with young children and anxiety about parents’ reactions to nursery staff forming close relationships to their children,’

(Elfer, 2012 p.131)

It has been my experience that this attachment not only develops between the child and the early years practitioner but also between the practitioner and the parent. This close working relationship emphasises the positive outcomes of a close bond between practitioner, child and parent and counteracts, in my opinion, any negativity associated with Bowlby’s theory. McDowell *et al.*, (2012, p.231) mention Bowlby’s enduring legacy but also how focusing on the bonding relationship can make the role of the key worker ‘something less than professional.’ Moyles (2001, p.82) adds to this debate and suggests that this focus can also reduce the professional relationship to a ‘low level operation in which children receive care but which negates or rejects education.’ I have witnessed the relationship between care and education and children receive the best start when each works to engage the best of the professional practices of both.

Children aged two to four are beginning to understand they are independent from the environment and people around them. Broadhead (2010, p.18) emphasised that ‘Friendship is so much more than the development of social skills or being active within a peer group; it is an integral part of the young child’s growing sense of culture and identity.’ During the age of two to four, a child’s self-conscious emotions develop and they begin to understand that they have their own unique feelings. Children are beginning to appreciate that some feelings can result from what we believe others think about us, e.g. pride, embarrassment. An understanding of this is very important to any adult’s interaction with young children, especially if, as at the Centre, behaviour management is based on positive re-enforcement and the building of a positive self-image for the child.

At four years, peer relationships are beginning to take on an increasingly important role in the lives of young children as their social interaction is increasing. Children's play is developing to include associative and cooperative play, as opposed to playing near another child with their own agenda (Broadhead, 2004, 2010). Children are beginning to understand that their reactions can affect others because they are starting to experience this for themselves.

A child's relationship with their peers can influence individual cognitive development, not only through direct learning opportunities, but it also has emotional and social consequences on the individual. How children see themselves through the eyes of others has a significant bearing on their ability to learn. The adult who interacts with young children needs to ensure that they see a positive reflection of themselves in each interaction. Goleman (1995, p.251) observes that:

How popular a child was in the third grade has been shown to be a better predictor of mental health problems at age eighteen than anything else – teachers' and nurses' ratings, school performance and IQ, even scores on psychological tests.

For some children, this theory directly conflicts with their experience. It is often between the ages of two and four that special needs or delayed development become apparent. Children of this age may often, for the first time, find themselves in a social learning environment where they can be directly compared to other children.

Children eventually develop the ability to empathise with others, that is, the ability not only to understand, but also to empathise with the emotion of another. Empathy is a high order emotional skill and, according to Smith *et al.*, (2003, p.244), progresses through three different stages; personal distress (up to 20 months), emotional contagion (20 to 30 months) and egocentric empathy (30 months and over). Children move from experiencing their own distress to connecting with the distress of another and eventually to being able to understand the feelings of another. This aspect of children's development was particularly relevant when, during the reflective sessions of the LDAs, children – sometimes in small groups – were asked to discuss their own learning and the learning of others. RQ3 required that children discuss their learning and that of others: the practitioner needed to ensure that this was a positive experience for all the children involved so that they remained open to available learning opportunities.

Wellman (1990; 2010) proposes that a child's initial thoughts about themselves, their needs and wants are connected to their first desires. Children are coming to terms with their own desires as well as beginning to understand that other people may have separate wishes. By age three, children begin to understand that not only do people have desires but that an individual's beliefs can influence these desires. At this stage, children can begin to make their own predictions about the behaviour of others. Some mature four year olds understand that 'people act on the basis of their beliefs and not simply on the basis of reality,' (Keenan, 2002, p.215). Children are therefore beginning to appreciate that what interests *them* may or may not be interesting to other children. This requires a degree of social and self-awareness.

The National Research Council (2001) supports the idea that young children have the ability to begin to understand their part in the learning process. A report by Bereiter and Scardamalia (1989), cited by the National Research Council, states:

Recent research on "theories of mind" confirm that not only can children intentionally learn, but they can develop theories of what it means to learn and to understand and affect how they function in situations that require effortful learning.

(National Research Council, 2001, p.44).

According to the National Research Council (2001, p.47), 'learning requires self-regulation. Therefore, behavioural issues, and the social and emotional environment of preschool classrooms that affect behaviour, are crucial to effective learning.' Self-motivation and regulation are natural states for the young child at play. It would be impossible to explore young children's learning without understanding the importance of the role of play in the learning process. Play is the way that young children acquire knowledge and skills. Jarvis and Broadhead (2009/10, p.20) conclude:

Given that learning through play is the natural learning mode of all primate species, it is reasonable to suggest that this would be a very positive development in compulsory education.

Early years researchers and practitioners have established comprehensive pedagogical structures based on the study of the role of play in children's learning (Wood and Attfield, 2005; Whitebread *et al.*, 2009; Moyles, 2010; Fisher *et al.*, 2010). It is from my own experience and reading the research of others that I have begun to develop my own understanding and theories about young children at play. I consider that one of the most

important aspects of play is to be giving children the opportunity to learn how to 'get on with others.' For example, Edwards and Alsom (2009, p.6) report:

Children who engage in complex forms of socio-dramatic play have greater language skills than non players, better social skills, more empathy, more imagination and more of the subtle capacity to know what others mean.

Jarvis and Broadhead (2010, p.20) acknowledge 'Social free play is important for complex autonomous social behaviour leading to self-knowledge and social competence.' Siraj-Blatchford and Sylva (2004) have stated that settings where there was a balance between child-initiated and practitioner-initiated learning activities were the most effective in terms of children's cognitive, social and dispositional outcomes. The exact proportion of this balance is a question that requires further investigation.

The Welsh Assembly Government (2008c, p.5) cites the Rumbold Report (1990):

Play that is well planned and pleasurable helps children to think, to increase their understanding and to improve their language competence. It allows children to be creative, to explore and investigate materials, to experiment and to draw and test their conclusions ... Such experience is important in catching and sustaining children's interests and motivating their learning as individuals and in co-operation with others.

This same document proposes, 'When we talk about play we are referring to children's active involvement in their learning' and that 'Play is an essential ingredient in the curriculum,' (Welsh Assembly Government, 2008, p.5). Play is an important medium through which practitioners can interact with children. They need to make the most of every opportunity to aid the children's learning through participating in the play themselves, or making changes to the environment.

Social interaction in play can become quite complex, including sharing, turn-taking, adopting and empathising in a role. Reviewing the work of Edmiston (2000), Durden and Dangel (2009, p.297) mention the idea that 'Children's play is analogous to a workshop or dress rehearsal for life for the many ethical and moral decisions they will have to make.' This can all be acted out in a safe and comfortable environment. They also commented on how Edmiston views the role of the teacher as an observer of learning by stating:

Adults must veer from Piaget's and Vygotsky's positions, respectively, as teachers as observers and facilitators of children's learning and become more active participants by engaging in co-authoring experiences with children.

(Durden and Dangel, 2009, p.297).

It is a requirement in the Foundation Phase for teachers to observe, facilitate and participate in children's learning (Welsh Assembly Government, 2008a). The results of the CLDOs raised awareness of these issues and helped practitioners meet these challenges.

Donaldson *et al.*, (1983) support the views of Jerome Bruner (1996) by recognising that, during play, children have the opportunity to make mistakes, make guesses and be intuitive. Donaldson is interested in intuitive thought as a worthy goal for us all to learn and use. Children can be intuitive at a young age and, as they mature, the intuitive thought process may lead to unconsidered, instinctive action that sometimes may be inappropriate for the situation. However, instinctive reaction can, in some instances, take a child beyond their normal competencies and understanding in a positive way. Bruce (2001, p.112) argues:

It is in their play that children show intelligence at the highest level of which they are capable. Play opens up new possibilities in thinking and develops the emotional intelligences that make feelings.

Intuitive actions can be nurtured as well as controlled, and the thoughtful practitioner aims to achieve this balance. The experience of learning from a mistake is a valid and useful one for children to understand, as Donaldson *et al.*, (1983, p.243) says:

A person who thinks intuitively may often achieve correct solutions, but he may also be proved wrong when he checks or when others check him. Such thinking, therefore, requires a willingness to make honest mistakes in the effort to solve problems.

Even in 'free' play, young children are subject to the control of adults, both at home and in childcare and educational settings. It is the adult who often decides who a child plays with and, in doing so, they inadvertently influence a child's potential to learn, experience and develop in particular ways.

2:5 Change and Reflective Practice

Miller and Cable (2008, p.173) state that 'Reflection is generally acknowledged as a key professional attribute.' Reflection is defined by Finlay and Gough (2003) as 'thinking about something after the event.' It was important for my research that 'thinking about something' resulted in change. This was a central aspect of the professional doctorate. The change involved improving teaching strategies and adapting those already in existence to meet and develop the varying learning dispositions of the young children attending the Centre. The

change to teaching was initiated through the process of reflection by practitioners working at the Centre. Finlay (2006, p.5) reminds us that ‘... research – which encourages us to reflect on ourselves and on the social world around us – has the potential to be transformative, changing both us and our participants.’ Miller and Cable (2008, p.173) acknowledge that:

Reflection on practice is an ongoing process through which practitioners learn to critically examine their own practice and that it can support the development of communities of practice both within and across settings.

This is particularly pertinent for me in the working situation at the Centre where provision includes elements of both education and care. It was important for this research to succeed in supporting staff from each of the settings at the Centre in working together to examine their own practice, share ideas and plan the way forward. This whole section of my study relates to RQ3, which requires a change in practice for both staff and children.

According to Paige-Smith and Craft (2008, p.21), reflective practice requires an element of recording and documentation. The practitioner has to decide who they wish to share their reflections with and time and space is needed to complete the process. Paige-Smith and Craft (2008, p.28) also mention different levels of reflection, some deeper and taking longer than others. Moss’ introduction in Paige-Smith and Craft (2008, p.xiii) describes deep reflection as ‘a rigorous process of meaning-making, a continuous process of constructing theories about the world, testing them through dialogue and listening, then reconstructing those theories.’

McDowell *et al.*, (2012, p.235) cite Appleby and Andrews, who succinctly describe reflective practice as ‘complex, multi-faceted process which, in its most effective form, is personalised and owned by practitioners.’ It was important that staff at the Centre had ownership of and engaged with the research, which would help further develop reflective practice and enhance its possibilities. McDowell *et al.*, (2012, p.235) go on to say that ‘an environment must be created whereby practitioners can extend their thinking and understanding and enhance their sense of the possible.’

Picchio *et al.*, (2012, p.161) discuss the relevance of the timing of reflection and how this can affect the type of reflection. They suggest that ‘in order to produce a narrative of the experience in which they have participated, [participants] have to be able to distance themselves from it.’ Picchio *et al.* (2012, p.161) develop this further and conclude that ‘In

early childhood practitioners' reflection, the temporal distance from practice necessarily implies different levels of reflection.' The timing of the reflections of the practitioners in this research varied according to the task. The reflections on practice happened within a day or two of the event; the reflections on the learning typology and CLDOT happened over months. According to Picchio *et al.*, (2012) this can be defined as the difference between reflecting-in-action and the more evaluative reflection-on-action. This is itself reflective of the work of Schon (1983). It seems to me that there is value in both these processes and each was appropriate to different aspects of my research as previously noted.

I am a practitioner as well as a researcher, and part of my motivation for this research was to improve my own practice as well as that of others. Undertaking this research has refined my observational skills and my knowledge of how to make improvements to existing practice at the Centre. As Moyles (2006, p.14) suggests, 'In reflecting in depth, people also analyse whether everything is as it should be or whether changes are needed.' Reflection has enabled me to participate in constructive but often difficult dialogue about practice in an objective way with all staff at the Centre regardless of their professional background. Moyles (2006, p.15) talks of:

'active reflection' because we feel it is important that everyone considers her/his life carefully, analysing, evaluating and interpreting not only what 'is' but also how things should or could be different.

Vandeerlinde and van Braak, (2010, p.310) say 'teachers indicated that they have more appreciation for practical and applicable research.' I knew that if I was to make a difference and improve the teaching and learning in my setting, then I needed to establish a cyclical process of research, practice and further research. Vandeerlinde and van Braak, (2010, p.312) speak of 'Evidence based research [which] involves gathering empirical evidence about what teaching methods are effective and [which] should inform practitioners about what they should do in practice.'

Change is an essential element of improvement and the change involved in this research study had three dimensions: it was personal, organisational, and it involved others. Rowling (2003) suggests that a traditional pattern explaining the process for change would be analyse, think and change. This forms a direct link to the action research cycle of plan, action, and review. It was important to me that reflection became embedded in the Centre if this research was to continue as a cycle and change was to be implemented. Brodie (2010) cites

Children's Workforce Development Council (2008): 'Reflective practice is one of the tools that can be used by Early Years Professionals to fulfill their role as 'change agent'. Moyles *et al.*, (2002) summarise the gains to be made for both pedagogy and practitioners in the reflective process. This process mirrors the research methodology in the present study that also had a cyclical element of phases: observation and interviews, analysis, change; and further observation and interviews. The Results chapter documents in detail each of these elements and explores further the connections between these and the Literature Review.

Schon (1983) warns of some of the consequences of developing a pedagogy based on reflective practice:

In a school supportive of reflecting teaching, teachers would challenge the prevailing knowledge structure ... Conflicts and dilemmas would surface and move to center stage. In the organizational learning system with which we are most familiar, conflicts and dilemmas tend to be suppressed or to result in polarization and political warfare.

(Schon, 1983, p.1)

It was part of my role, during the life of the research project and beyond, to ensure that the positive results of reflection outweighed any negative impact. It was important to manage the change and ensure that staff security and direction were not lost. This dilemma is discussed further in the professional development section of the professional doctorate. Edgington (2005) comments on this challenge: 'Reflective practitioners are outward looking and thrive on new challenges, enjoy and are committed to their work.'

Fullan (2001) suggests that leaders of change require moral purpose, an understanding of the change process, the ability to foster positive relationships, knowledge creation, sharing and coherence making. He further suggests that not only are these characteristics important in themselves, but they mutually reinforce one another to produce positive change. It was important for me to inform staff regularly as the research progressed, in order that any change was understood, accepted and, in some cases, anticipated by staff. I was helped through this change process by the fact that staff were culturally open to new ideas and to improving and developing the education and care offered to the children and families attending the Centre.

There is a further tension that exists when completing action research within an education setting. This tension is expressed by Fullan (1991) when he compared teaching to a transient business when often, after one year, pupils move on and new relationships need to be

established. This process constantly requires change from the individuals involved, which would appear counter-productive to learning if, as many theorists propose, secure relationships and knowledge of the young child, leading to safe attachment (Bowlby, 1973), are fundamental to learning, especially in the early years.

Fullan (1991, p.37) proposes that change in education can have three possible components

The possible use of new or revised materials (direct instructional resources such as curriculum materials or technologies). The possible use of new teaching approaches (i.e. new teaching strategies or activities) and the possible alteration of beliefs (e.g. pedagogical assumption and theories underlying particular policies or progress).

This research study was mainly concerned with the last two of these components: new teaching approaches and changing beliefs. Until the commencement of this project, teaching strategies generally used at the Centre had derived from the preferred teaching style of the adult, a prescribed curriculum, school policy and other examples of good practice from a variety of sources. It is my opinion that alteration of long-held beliefs is the more difficult option to initiate, but it is also the one that has the greatest potential to positively influence practice.

Questioning existing strategies and pedagogical beliefs can be threatening and disturbing.

Smith (2009, p.57) cites the work of Schon, who expresses this paradox by saying that:

A learning system ... must be one in which dynamic conservatism operates at such a level and in such a way as to permit change of state without intolerable threat to the essential functions the system fulfils for the self. Our systems need to maintain their identity, and their ability to support the self-identity of those who belong to them, but they must at the same time be capable of transforming themselves. (Schon, 1973:57)

The Early Years Centre is part of the Educational Directorship in the local authority. Fullan (1991) expresses an interesting theory about change in the educational sector. I particularly identify with the parallels he draws between education being, by its nature, concerned with the change of the individual and research that includes change as an integral part of the research process. Education is concerned with allowing young people to take a risk, learn and step into the unknown. This attitude is particularly pertinent to the Foundation Phase, the new curriculum for 3 to 7 year olds in Wales (Welsh Assembly Government, 2007), which

aims to help children learn how to learn, develop thinking skills, and acquire positive attitudes towards lifelong learning (Welsh Assembly Government, 2007).

Practitioners often have other external pressures imposed on them. Whitebread *et al.*, (2007, p.41) illustrated this by suggesting that ‘The focus of the National Curriculum, for example, has been claimed to be on content and the body of knowledge children need rather than on more generic learning and thinking skills.’ In practice, however, the imposition of what to learn has in many cases affected the ‘how’ of learning. The initial effects of the literacy and numeracy strategies, according to Whitebread *et al.*, (2007, p.41) have ‘constrained opportunities for the development of individual learning styles and independent lines of enquiry.’

Added to this, the school curriculum has external change imposed regularly on it. This change is not based on positive personal relationships or as part of a long-term plan or goals, but often results from the need for short-term political impact. This process does not fit the suggested criteria for successful change discussed above. Often the initiator of the change is unknown to the people who have to implement the transformation. It is a reality that educational change is frequently at the centre of debate in politics and society as a whole as much as in education.

2:5 Conclusion

RQ1 asked whether it was possible to observe learning dispositions in very young children. To answer this question, I explored in the Literature Review the terminology used in the question. I have already covered in detail the theoretical debates involved in learning dispositions. However, my enquiry and observation of children led me to consider further aspects involved in research with very young children in a working setting. Every child has a unique personality and characteristics. This contributes to the constant tension in education settings, between reconciling this individuality with the expectation of learning within a group situation. Adults in an early years environment expect children to focus, within what may be a conflict situation. The conflict exists between the young individual child and the group dynamics of a setting. Many important educational psychologists, for example Vygotsky (1978) and Bruner (1966), would argue differently however, by proposing that peer and group learning is a natural learning environment for children. Those involved in

educational research and leadership need to help practitioners make sense of this paradox. The contradiction is complicated further when we consider that the preferred learning disposition of the child may not comply with the expected and accepted ways of learning, prevalent in some learning environments.

Exploring learning style theory and child development theory together resulted in realistic and optimistic practice, aimed at helping children achieve their potential. Edwards (2005, p.69) confirms:

All people, who in any place have set themselves to study children seriously, have ended up by discovering not so much the limits and weaknesses of children but rather their surprising and extraordinary strengths and capabilities linked with an inexhaustible need for expression and realization.

RQ2 asked whether young children's learning dispositions stay the same, or whether they change over time. The definition of learning dispositions quickly became a complex one. On reflection I think I should have explored this term from all perspectives (Educational and Psychological) before using it in my second research question. The theories discussed in this chapter reflect the complexity of the question and, although I have been able to explore this question with my research population over two years, the long-term answer is still under debate. More importantly, the theories of Bowlby, Piaget, Vygotsky, Goleman and Gardner and the work on brain development, metacognition and theory of minds have helped me to understand the learning dispositions studied in my research.

The Literature Review gave me the background knowledge I needed to pursue my research. The research into how important choice is to children's development, the theory behind delayed gratification, and the different facets of memory particularly influenced the research design. It was enlightening to discover the commonalities between learning style research with an older population and my research with early years children. It seems that some of the learning characteristics are the same whatever the age of the learner. Dividing learning into its constituent parts was a process that I needed to appreciate before I could develop the research instruments in depth for my study.

Once my research instruments were established and the research methods in progress, I was able to focus my attention on developing the strategies needed to answer RQ3. This question focused on the change element of my research and I particularly found the ideas and theories

about reflection and change essential to the development of my own reflective practice and that of the staff involved in the research. The work of Fullan and Rowling helped me not only to answer Research Question 3 but to successfully put aspects of the change theories into practice at the Centre. Early years practitioners in Wales, because of the Foundation Phase and its improved staff-to-child ratios, have the opportunity to plan for developing learning skills and capabilities on an individual basis. This change in policy has helped to facilitate practically the actions resulting from this research.

The following chapter specifies the design and methods used in this research. The planned methodology relied on the research literature to ensure that this study was informed and meaningful. The practical application of the methods in turn added to the debate at the Centre about the research literature. The Methodology chapter identifies the parallel components between the Action Research Cycle and Professional Doctorate research. My professional development is comprehensively detailed in the Professional Development Portfolio.

CHAPTER 3 Methodology and Design

3:1 Introduction

The setting for this research is in an area that has been socially and economically disadvantaged throughout its history. However, some families now face these disadvantages alone, without benefiting from the support of an extended family. I have been the Centre Manager at this setting since the late 1990s, when it was a Nursery School, through to its development as an Early Years Centre in the present day.

Hodgkinson and Macleod (2010, p.174) question ‘Can any methodology capture something as elusive as learning when we impose meaning through the ways data are collected and analysed?’ I believe I have reflected learning through my research design because the main research tool was developed over time, drawing on the shared understanding and craft practice of Centre staff. The entire research design included three phases: Figure 2 illustrates the whole research process, showing the activities and what happened during each phase.

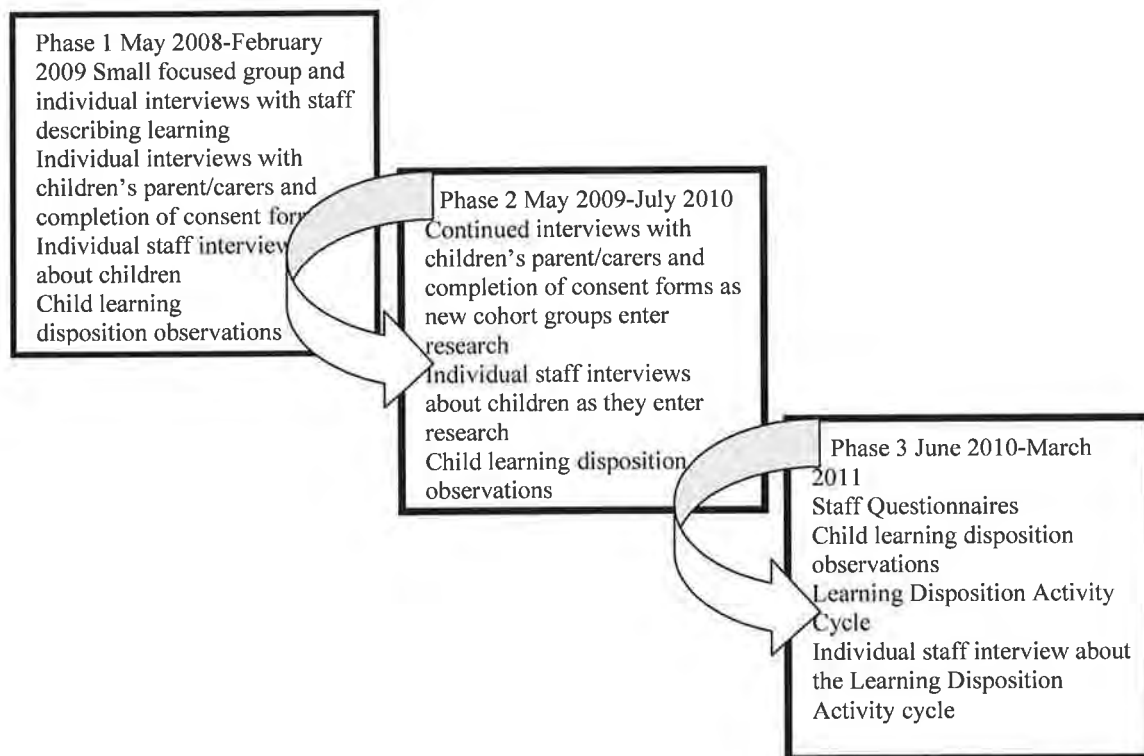


Figure 2: Flow Diagram Showing the Three Research Phases.

This research was a part of the everyday teaching, learning and interaction within a working Early Years Centre and, as such, consolidated the empirical nature of the research. The methodology included individual semi-structured interviews completed with the children's main carers. This flexible method encouraged an informal approach with the children's main carers and allowed them to talk freely about their children. The research included consideration of the various developmental processes that are essential to children's growth and this information helped inform my research questions and research design. It was a cyclical process, which helped to refine practice, resulting in the use of teaching strategies to improve children's learning.

The interviews with the staff were more structured and included both individual and small group interviews. The structure of the interviews meant that I could methodically collect the information required for the research and the format facilitated the comparative nature of the data analysis. Individual interviews encouraged staff to give personal responses to the interview questions and the small group interviews allowed staff to interact and develop their ideas with one another. The staff questionnaires allowed me to accumulate a considerable amount of information in a short period of time. I wanted to find out if staff had ever spoken to the children on a regular basis about learning. I was also interested to find out what staff knew and understood about their own learning processes, as this would obviously shape the types of conversations they had with the children about learning.

It appears that most of the long-term learning theory research has focused on the post-6 age group as evidenced in the Institute for Learning Style Research (2009). Generally, the methods of collecting data such as interviews, questionnaires and multiple choice surveys could not be applied because of the age of the children in this study. Researching with younger children required a different approach. It was necessary for a sensitive adult to ask questions in an appropriate way, to observe and then to interpret professionally the gesture, body language, speech or action providing the response. The older children in the research were able to voice their opinions and, at times, answer questions directly.

Table 1 illustrates the timescales of the research phases and then how each phase linked to the research questions. The series of Child Learning Disposition Observations (CLDOs) reflected the age of the children involved in the study, the need to collect relevant and usable data and due consideration was given to the information contained in the literature review. Each set of

CLDOs studied the children during adult-led and child-led activities in both the inside and outside environments. There are important and long-term examples of research that has used observations as a means of collecting data in the early years: the EPPE Project started in 2002, First Report that began in 2004 and ongoing, and High Scope Weikart (1970) established in 1970 continuing through to today – although child observations are not used at this late stage.

Table 1: Research Phases and Links to Research Questions

Phase 1 May 2008 to February 2009 Research Question 1: Can we identify, observe and understand learning dispositions in children aged two to four years?
First interviews with individual staff when asked to describe learning Draft 1 Parent interview and consent form Draft 1 Staff interview forms First interviews with parents and staff Draft 1 Typology Draft 1 Child Learning Disposition Observation Tool (CLDOT) First Child Learning Disposition Observations (CLDOs) completed Draft 2 Parent and Staff interview forms Small Focused Group Staff Interviews Draft 2 Typology Draft 2 CLDOT Design of master data collection form Development of learning categories Data analysis
Phase 2 May 2009 to July 2010 Research Question 2: Do young children change their learning dispositions with age or adapt them to different learning environments?
Semi-structured recorded individual interviews with team leaders Completion of CLDOs with research groups Formal feedback to staff May 2010 Draft 3 CLDOT Data analysis
Phase 3 June 2010 to March 2011 Research Question 3: How is it possible to adapt pedagogy to influence a child's learning potential through understanding their acquisition and use of learning dispositions?
Completion of final CLDOs alongside first set of Learning Disposition Activities (LDAs) Beginning of LDA reflective cycle including interviews with children Staff Learning Questionnaire Draft 1 LDA proforma Completion of LDAs Completion of staff interview focusing on LDA process Data analysis

My analysis of the data was tempered and tested further by using the results of the study to change practice. This practice was then subjected to further analysis and evaluation by staff, parents and children at the Centre. Hodgkinson and Macleod (2010, p.174) further comment that 'Learning is a concept constructed and developed by people to label and thus to start to explain some complex processes that are important in our lives.' It is true that the learning of young children is very complex with many facets interconnecting. I also believe that young children's learning is vital to their well-being. Therefore, it was important to me that my work had a practical purpose. This practical application was integral to the professional doctorate and was central to my motivation to complete the research.

3:2 Research Design and Methodology

The research design was mainly qualitative because of the nature of the study, with some quantitative characteristics. This qualitative research design involved me in developing and understanding my role and skills as a reflexive researcher. Finlay and Gough (2003, p.5) suggest that 'As qualitative researchers, we now accept that the researcher is a central figure who actively constructs the collection, selection and interpretation of data.' As my understanding of what being a reflexive researcher evolved, I found that the underlying theories harmonised with my personality and management style at the Centre, in particular, the type of reflexive research described by Finlay and Gough (2003, p.10) as 'a confessional account of methodology or as examining our own personal, possibly unconscious, reactions. It can mean exploring the dynamics of our researcher-researched relationship.'

The choice between qualitative and quantitative research has often historically been between two distinct areas of analysis, as Wiersma and Jurs (2009, p.14) describe: 'Qualitative and quantitative research represents two distinctly different approaches to understanding the world, that is, the phenomena being researched.' Qualitative methods were used in the collection and analysis of the research data, particularly the interviews with staff, parents and children. Some quantitative methods were used in the collection and analysis of the staff questionnaire, observational data and some aspects of the LDAs.

The accepted knowledge and conventions pertinent to this research lie within the social science discipline. It relied on the interaction between children, adults and their environment for its data. This context was constantly changing and evolving throughout the research. It

was therefore necessary to reject the conventions that are often associated with natural science research, when the researcher is able to control more fully the context and variables of the research. Burrell and Morgan (1979), cited by Cohen *et al.*, (2001, p.6), agree that 'to see knowledge as personal, subjective and unique. However this imposes on the researcher an involvement with their subjects and a rejection of the ways of the natural scientists.' I have this same opinion of the epistemology of my research and acknowledge that it is personal and subjective.

Mukherji and Albon (2010, p.29) state that, in their studies and experience, 'Action Research often involves both quantitative and qualitative methods in tandem.' There are two other writers and theories that I believe would position my work within the qualitative field. These are Mason (1996, p.24), who describes the characteristics of qualitative research as 'exploratory, fluid and flexible, data driven and context sensitive,' and Slavin (1992, p.67), who says qualitative research 'emerges from the bottom up (rather than from the top down), from many disparate pieces of collected evidence that are interconnected.'

This research has been an action research project; the writing of McNiff and Whitehead (2010) describes my work and its main aim succinctly when they state that:

Action Research is about two things: action (what you do) and research (how you learn about and explain what you do). The action aspect of action research is about improving practice. The research aspect is about creating knowledge about practice. The knowledge created is your knowledge of your practice.

McNiff and Whitehead (2010, p.5)

This research study has not been a purely academic exercise: it has been about changing practice. Kurt Lewin (1948) observed that research that produces nothing but books is inadequate (Cohen *et al.*, 2001, p. 226). Whether one agrees with this or not, it is clear that action research aims to bring about change within an organisation or an individual. Carr and Kemmis (as cited in Cohen *et al.*, 2001, p. 227) regarded it as a form of 'self-reflective inquiry' by participants, undertaken in order to improve understanding of their practices in context with a view to maximising social justice.'

This research was completed both to instigate change at the Centre and to improve my own professional practice. I was able to meet these two aims through applying action research methods to my research. When I looked at and reflected upon the action research cycle, it

was interesting to note how, in many ways, it replicated the processes involved in the professional doctorate. Table 2 illustrates this replication.

Table:2 Professional Doctorate Research and the Action Research Cycle

Action Research	Professional Doctorate Research
Planning	Research Questions, aims and objectives
Action	Child Learning Disposition Observations Staff and Parent Interviews
Monitoring	Staff Interviews and Questionnaires
Reflection	Learning Disposition Activity Cycle

It was my intention to include the staff at the Centre as participants in this research because improvement to pedagogy can only be effective if the practising practitioners are supportive of the change required. Passmore (2001) mentions one of the earliest action research activities managed by Lewin, Bevelsan and Marrow, when the research included workers as participants and their contributions were valued:

The condition they [Lewin, Bevelsan and Marrow] created resulted in what we would call a learning organization today; workers were encouraged to experiment with different methods, to discuss them among themselves and to choose the methods they agreed were the most effective.

Passmore (2001, p.39)

This research study sets about emulating the ethos behind this early research, by engaging practitioners in change and becoming a learning organisation.

Bradbury *et al.*, (2008, p.84) takes this ethos a step further by comparing the relationship required to successfully complete action research with that required between an early caregiver and child. This is apt and reverberates with the circumstances of my own research. Bradbury *et al.*, (2008) mentions that both relationships need security, sensitivity and support in order to thrive:

The implications for action research as an egalitarian, collective problem-solving activity rooted in interpersonally sensitive and mutually supportive dialogue is that things will go better when those involved experience secure relationships on as many levels as are relevant to the activity.

Bradbury *et al.*, (2008, p.85)

The nature of insider research is such that the researcher has the benefit of being well familiar with the culture of the research organisation. This is certainly the case because an accommodating relationship already existed between me, as researcher, and the staff at the Centre. I know the research organisation very well and have been an integral part of its

development over the past 15 years. Costley *et al.*, (2010, p.6) comment on the positive advantages of this type of research relationship when they propose the view that ‘The success of projects may be in some part due to insider researchers’ ability to negotiate around systems and practices with creativity and ingenuity.’ A further advantage of being an insider researcher is the close and unique perspective I have gained from my long-term involvement and knowledge of the Centre’s organisation, culture, staff, parents and children. Sikes and Potts (2008) comment on this relationship and how it was first established and noticed by the early pioneers of insider research.

These sociologists, [Parks et al.,] and those that followed in their stead, believed that understanding required immersion in the field and data, which provided insight into how and why people did what they did in the ways that they did it.
(Sikes and Potts 2008, p.6-7)

There are many criticisms of insider research. Sikes and Potts (2008, p.6-7) state ‘A criticism often levelled at insider research concerns the extent to which it can be considered to be “objective” and hence “reliable” and “valid” according to the so called scientific criteria.’ I considered following the advice of Costley *et al.*, (2010, p.6) who state that:

There are many steps an insider can take to guard against bias in the work, for example careful attention to feedback from participants, initial evaluation of data, triangulation in the method of gathering data and an awareness of the issues represented in the project.

I have been able to use many of these approaches in my research methodology and this is evidenced in my research.

Observations have formed a significant part of major studies on aspects of early years education and care. There are many excellent examples of observational data being used previously in early years research, for example Highscope in America, (1962) and the EPPE Project in England (final report 2004). Teacher observations play a major role in developing pedagogy and meeting the individual needs of children in the Reggio Emilia schools in Italy. The play observations assessment tool devised by Broadhead (2004) has been used regularly at the Centre, the setting for this research. This assessment enabled staff to review provision as well as assess children’s stage of development.

The observations and experiences in this research were of real children in everyday learning situations and activities. The children in this research were very young and, by their nature,

inexperienced in some social norms. This often meant that they did not conform to socially accepted protocols: young children do not always act in the way that you expect them to. Therefore, the research observations had to be flexible and informal to accommodate this.

Slavin (1992) categorised observations into high inference or low-inference. 'High-inference behaviours require the observer to use a great deal of judgement ... low-inference behaviours [...] require less judgements,' (Slavin, 1992, p.90). I believe the research observations I have made are high-inference. They required me to record not only what I saw but to interpret the background to certain actions and what I thought a child was expressing through their actions. I am very experienced at observing young children in the setting for the research and my own professional experience, knowledge and practice informed these judgements, which I made to the best of my ability.

The design of the observation form, the CLDOT and the interview questions with parents enabled non-early years professionals to participate and understand more about the research and learning process. The CLDOs allowed children and the researcher to act naturally in their customary environment. I aimed to ensure that the data collection was a normal part of the children's day. The evidence for the success of this approach was available after the first set of observations, when the CLDO data reflected the natural behaviour of the children, as understood by the staff at the Centre.

It has been my ambition through this research to understand children's natural curiosity and willingness to learn; learning seems to be part of their nature. I wanted to study this process in detail and attempted to tease out what was going on in the learning process. My research was subject to continuous interaction and change and to the ongoing effects of that change. These are particular difficulties associated with research in schools, as Cohen *et al.*, (2001) remarked, it is difficult to establish a test situation in a school when relationships and participants are constantly changing. 'The point is nowhere more apparent than in the contexts of classroom and school where the problems of teaching, learning and human interaction present the positivistic researcher with a mammoth challenge,' (Cohen *et al.*, 2001, p.9). Children and adults in school and their interactions cannot be isolated and therefore I cannot study individual variations and their effects. My research observations were completed over a two-year period. They therefore reflected and considered the changes

occurring throughout this time: changes in the children, adults and their reactions to different learning situations.

Cohen *et al.*, (2001, p.105) also suggest a general explanation of validity to be ‘that a particular instrument in fact measures what it purports to measure.’ It was possible to test the soundness of this theory when, halfway through the action research, I reported the results of the observations to staff who were able to confirm whether or not they thought the observations reflected the learning of the children involved. Wiersma and Jurs (2009) propose that content validity constitutes two concepts, internal and external validity. They explain these concepts as:

Internal validity is the extent to which results can be interpreted accurately, and external validity is the extent to which results can be generalised to populations, situations, and conditions.

(Wiersma and Jurs 2009, p.5)

I ensured that this research was valid, within the limitations of the framework of my study when applying both these definitions. It was possible to establish internal validity as increasing numbers of staff completed the CLDOs using the CLDOT and the LDAs.

A test for internal reliability occurred when a member of the teaching staff completed a set of observation sheets and the data compared favourably to the research data. Accurate assessment of a child’s learning disposition was vital to the rigour and authenticity of my project. MacNaughton and Hughes (2009, p.126) explain that ‘rigour refers to the care and thoroughness with which you collect and analyse your data.’

Throughout the research, the staff and I debated the reasons for the selection of the learning characteristics and their descriptions. This contributed to the rigour, consistency and reliability of the data. It ensured that the judgements made were dependable with the descriptors accurately describing each child’s learning. The data recorded whether the children’s favoured learning disposition changed over time, with the learning environment, or whether it was influenced by both. If there is consistency and transferability in the data, then this can help practitioners respond sensitively to the preferred learning approaches of children.

Some of the criteria in the longitudinal CLDOs were under my control, such as the adult-led activities, whilst others were subject to a variety of possibilities. The possibilities arose mainly from the child-led activities and the unpredictable results of interactions between adults and children. Cohen *et al.*, (2001) suggest it is possible to organise observations so that they happen with the same children under similar circumstances, and using the same methods for assessment and observation. The longitudinal CLDOs focused on observing individual learning dispositions and characteristics.

Some sections of the research data could be tested using triangulation methods and the relationship compared. The different data sources were child observations, staff, parent and child interviews. Siraj Blatchford (2001, p.204) confirms that it can be helpful 'to triangulate your data from a second or third methodological source.' I was able to triangulate my data by comparing my results with the other varied assessments normally carried out at the Centre, with the information obtained during the parent interviews and with the children's own views about their learning.

3:3 Ethics

Since this research study was not funded through a particular programme or organisation, it was not subject to any of the external pressures that can sometimes initiate an ethical dilemma for the researcher. It was, however, subject to my own motivations for completing the research. It was important to consider this at the outset, even though it was not easy to be objective when reflecting on personal motives. However, I have reached the following conclusions as objectively as possible, within the above limitations. My initial motivation to complete this study was to give the children attending the Centre the best possible start. I wanted to maintain and improve the reputation of the Centre as a leading early years organisation within my local authority.

I have always believed in managing by example, and this research helped to maintain my position as principal learner and early years professional within the organisation. When I added to this the role of researcher, I needed to examine how my personal reflections and potential source of bias might impact on the research itself, as Finlay (2002, p.211) says 'Most qualitative researchers will attempt to be aware of their role in the (co)-construction of knowledge.' There is no doubt that my educational beliefs had an impact on this research,

not only during the research process but also because of the existing pedagogy at the Centre. Ahern (1999, p.407) accepts that ‘... total objectivity is neither achievable nor desirable in qualitative research.’ She suggests accepting the existence of bias and focusing on exploring how this has influenced the research and its findings.

In my attempt to grapple with these issues and to be a reflexive researcher, the picture is further complicated. I am both a participant and reflexive researcher, and Finlay (2006, p.21) describes this type of reflexivity as ‘critical self-reflection, focusing on the ways a researcher’s background, assumptions, positioning and behaviour affect the research process.’ Bolton (2010) describes the reflexive practitioner as someone who reflects and is able to analyse not only their actions but why they have acted in a certain way. Bolton (2010, p.13) says that:

Reflexivity is making aspects of the self strange: focusing close attention upon one’s own actions, thoughts, feelings, values, identity and their effect upon others, situations, and professional and social structures.

Bolton (2010, p.13) goes on to say that ‘Reflexivity is potentially more complex than being reflective,’ although, in her own work, Bolton (2010, p.14) does not differentiate between the two but says ‘The “through the mirror” method enables a reflexive and reflective journey, without analysing what is taking place at any one time.’

This is partly true of other staff at the Centre who, whilst taking part in the research, were involved in reflecting on and, more importantly, evaluating the results of the research. This process sometimes included ‘letting go’ of how they perceived their role as the teacher, and accepting and acting upon a different premise. Finlay (2002) describes and explores the relationship between the participant in the research and those who are involved as co-researchers:

At the very least this involves participants in a reflexive dialogue during data analysis or evaluation. Here researchers, simultaneously participants in their own research, engage in cycles of mutual reflection and experience.

(Finlay, 2002, p.218)

One of the aims of this research was to encourage quality reflection and the development of reflective practitioners. In the Literature Review I have discussed the possible negative consequences of constantly questioning practice. This, however, is far outweighed by the benefits the reflective practitioner provides to improving pedagogy. As manager of the

research setting, it was important that I did not generate an atmosphere where staff began to feel insecure in their roles and responsibilities. This is, however, different from encouraging staff to reflect on their practice and identify areas for change, because this is a part of my managerial role. There can be a complicated relationship between the two, as Moss (2006) describes 'The worker as researcher is also a reflective and dialogic practitioner,' (Moss, 2006b, p.36).

It was important in my efforts to be democratic in my research. I did not lose the essence of my research or fail to make the changes to improve practice. Further, I counteracted this possibility by focusing my own thoughts and those of my staff on the benefits of this research for the children. This helped to make the changes less personal and more focused on the children attending the Centre. This was further supported by including me as researcher and participant in the changes required as a result of the study. Finlay (2002) addresses both these issues and comments that:

While studies are to be valued for their collaborative, democratic inclusive spirit, critics reject the pronounced element of compromise and negotiation which could potentially 'water down' the insights of single researchers. In reply, collaborative researchers argue that dialogue within a group allows members to move beyond their preconceived theories and subjective biases towards representing multiple voices.

(Finlay, 2002, p.219)

Research with very young children involves the ethical dilemma of gaining appropriate informed consent from participants who may not developmentally be ready or able to give such consent. I therefore decided that the gatekeepers for this pilot study were foremost the parents of the children involved and the Governing Body of the Centre. Both gave permission for the research to be undertaken. It was important to obtain the goodwill of the staff employed at the Centre so that they would engage with the research. Staff were directly involved in the interviews, questionnaires and observations. Towards the end of the research, they became an integral part of the successful implementation of any improvements to pedagogy at the Centre.

If our aim of giving the children attending the Centre the best possible start was to be achieved, measures needed including that would help negate the effects of long-term economic and social disadvantage, as well as poverty of aspiration, on the children within the local community. Kiernan and Mensah (2011, p.317) conclude from their research that

It was clear from our analyses that poverty mattered, but that persistent poverty was even more detrimental for children's attainment.

They take this further by saying that 'parenting is a key mediator of poverty and disadvantage in relation to children's achievement in their first year at school,' Kiernan and Mensah (2011, p.328). This objective coincided with one of the original political and motivational aims for establishing the Centre, that of regeneration within a local area. In my opinion, it is neither ethical nor moral to use children's background as an excuse for under achievement. Kiernan and Mensah (2011, p.328) would support this approach as they confirm:

It was also clear from our analyses that children from poor families and those with lower levels of family resources who experienced more positive parenting were more likely to be doing well in school, and the differences were quite marked.

If this research helped to improve the learning expectations of the children attending the Centre, enabling them to achieve their full potential, then the project was worthwhile.

I have detailed knowledge of the children's background because of my role and close relationship with them. It was necessary to take precautions against this influencing both the collection of the data and the results by involving a third party in some of the data collection for comparative and moderation purposes. Centre staff were included in completing some of the research observations, especially once the observational criteria were clearly established and all cohort groups included.

Cohen *et al.*, (2001) are particularly concerned with the ethical issues specific to educational research. They propose that:

Ethical concerns encountered in educational research in particular can be extremely complex and subtle and can frequently place researchers in moral predicaments that may appear quite irresolvable.

(Cohen *et al.*, 2001, p.49)

An obvious ethical and moral issue when testing new teaching strategies and techniques is that there was only one chance to get things right, for the children involved. Social research already informs us that early years experiences can have a long-term effect on children. This was a major responsibility, often resting with the adults caring for and educating children in a professional setting.

Confidentiality was essential to this research, especially considering the age of the participants. I was aware that it may have been possible to identify the organisation involved in the research. I have taken great care throughout the research, however, to ensure that no particular child can be identified. I have also safeguarded against identification at a later stage, through any publication. Bryman (2001) mentions possible harm to the research population through increased attention or expectation from certain groups within the population.

It is possible that the pupils that had not been identified as 'spurters' who would excel in their studies were adversely affected in their intellectual development by the greater attention received by the 'spurters'.

(Bryman, 2001, p.479)

I have avoided this negative effect in my work by including the whole population in any changes to pedagogy resulting from the research. I have used my professional knowledge and experience to minimise the impact of any personal bias on the research data. The observations have recorded behaviours based on a shared understanding and development of key terms by the researcher, staff at the Centre and contributions from the children's parents and main carers.

Obtaining informed consent from the main carers of the children involved in the research was relatively unproblematic for me. I have easy and straightforward access to the group of people required, and it was possible for me to explain my research to them. This explanation included information about: the type of data I was collecting; how I would use the data; any likely outcomes and what was involved in the main carers giving informed consent.

I needed to consider that, when being asked to give informed consent, parents may have felt inhibited and compromised by my professional role at the centre. It was possible to counteract this through the positive and familiar relationship between the carers and myself. I was careful to ensure that the initial meeting was informal and friendly. Some carers may have a limited understanding of the processes involved in the research, so it was my responsibility to explain all aspects clearly – particularly how the research might affect participants.

While it was not possible to gain explicit consent from the children involved in this research, there are ways that young children can make their feelings and wishes known to any

researcher sensitive to their needs. Mukherji and Albon (2010, p.38) suggest that 'the researcher needs to be sensitive to the moment in order to pick up on the child's cues.' If children move away or change their behaviours resulting from the observations, then I would have considered these actions to be an expression of not wanting to take part. Young children have minds of their own and are capable of refusing to do something if they wish.

The age of the children involved in this research meant there was an imbalance of power between the researcher and the participants. It was impossible to eradicate this in any meaningful way. They were young children and I was the adult with the power and authority. Therefore, at this stage it was better to acknowledge and be mindful of this throughout the period of the research. I did this by remembering that there would be occasions when the children would not want to participate and that I might have to change my plans to accommodate this.

As I managed the staff participating in the research, there was an imbalance of power inherent in these roles too. Many of the problems resulting from this were resolvable by the supportive and equitable relationship that already existed between me and the other staff. This relationship had been built up over time and was an open and honest one. There was an open-door policy at the Centre for staff, children, parents and carers. All suggestions were respected and valued parents and staff were familiar with the process of influencing policy and practice as evidenced in the questionnaires, interviews and training information included in the appendices.

There were times when staff were asked to participate in the research. This involved the use of staff time and the organisation of this was within my remit as Centre Manager. It was important that this did not compromise the duties and obligations of the staff to the children at the Centre – indeed, it was imperative that the needs and welfare of the children and the staff came first. Every time I made a request of staff that involved drawing them away from their primary duties, I considered the effect this might have on the children and the service provided. If this was unacceptable then I either changed the timing of the activity or provided cover for staff myself.

3:4 Implementation of the Research Design

Table 3 shows how each of the cohort groups entered and exited the research. There were five groups involved labelled A to E. Children entered the study at the age of 24 months and exited as they attained 48 months. All the cohort research groups were included in the research by September 2009. From this date, observations were repeated at approximately three-monthly intervals until January 2011. Additional groups were included as the children reached their second birthdays and removed as the children reached their fourth birthdays. This ensured that the child observations and data tracked children as they matured over this period.

Table 3: Cohort Entry to Research Study

Observations	24 M	30 M	36M	42M	48M
SEPT 08 PHASE 1	A1	B1	C1	*	*
MAY 09	A	B	C	D	*
SEPT 09	E	A	B	C	D
JAN 10	E	A	B	C	D
APRIL 10	*	E	A	B	C
JULY 10	*	*	E	A	B
SEPT 10	*	*	*	E	A
JAN 11	*	*	*	*	E

Groups A1, B1 and C1 in Phase 1 became Groups A, B and C in Phases 2 and 3

The children observed in the research were from similar economic, social, cultural and religious backgrounds, although each had different life experiences. My research involved groups of young children (n= 6) attending the Centre aged 24 months, 30 months, 36 months, 42 months and 48 months. This age range crossed the traditional barriers that often exist between childcare and education providers. They were from two school year groups, pre-nursery and nursery as well as the pre-school settings of Flying Start and Day Nursery.

The groupings originally aimed to ensure that there was an equal proportion of girls and boys. This was not always possible because the age of the children took priority. The nature of the research meant that the use of a control group would not be viable, ethical or relevant to the action research. All children from the general population were subject to any changes to pedagogy that resulted from the research. The problem of attrition is present in most studies

of this type. However, I minimised its impact by including 30 children made up of five groups of six. This number meant that, even if some children left the research group, sufficient children would remain to complete and keep the integrity and validity of the research intact.

The research sought to observe and record what children aged 24 to 48 months were expressing about their learning. Children of 24 months cannot express their complex learning processes verbally, something that is difficult for the most articulate of adults. It was necessary, therefore, to collect the data through observing the children and recording their behaviours and actions. I was then able to reflect and use this observational data as a base from which improvements could be made to practice. Child Observations are an assessment method that was very familiar to both children and adults at the Centre. This facilitated the natural behaviour of the children in the research observations. Theories and information connected to observing young children are extensive and particularly relevant at this time in Wales. The introduction of the Foundation Phase for children aged three to seven emphasises the importance of child observations in informing and developing early years practice. The document published by the Welsh Assembly Government (2008b, p.3), 'Observing Children', states 'Opportunities to observe children should be an integral part of the daily routine of practitioners working within the Foundation Phase.' This document also proposes that, 'the main purpose of observing children is to determine where they are on the learning continuum in order to move them along, and to identify any difficulties, misinterpretations or misunderstandings,' (Welsh Assembly, 2008b, p.6).

The research data consisted of observations of activities that are a natural part of the children's daily routine. This was important to the research because, as Maconochie (2008, p.2) suggests, 'socio-cultural psychologists, (Vygotsky, 1978; Donaldson, 1978; Bronfenbrennar, 1979; Hogan, 2005) assert children appear less competent when they are subjected to clinical interviews, tests and surveys in experimental settings than when observed in their everyday social environments.' This is true of young children who can become insecure in new situations because of their lack of positive new experiences or negative experiences.

Reid (2005) studied research into learning styles and he summarised some of the common factors between the different research studies. I have compared my research to these features,

highlighting the following comparable areas. My research allowed for intermittent observations of children over time and of the same children in different situations. It was flexible because the observations used a variety of situations and settings. It was adaptable, accommodating children of different ages in a variety of activities in a context that was familiar to both researcher and child. The observations were interactive, with the opportunity to ask questions naturally of the children about their learning as they worked. These strategies helped me to ascertain how much the children understood and were able to verbalise about their own learning.

3:4:1 Phase 1 May 2008 to February 2009

My first research question about the identification and observation of learning dispositions in young children was explored in Phase 1. Figure 3 illustrates the research cycle involved in this Phase of the Research.

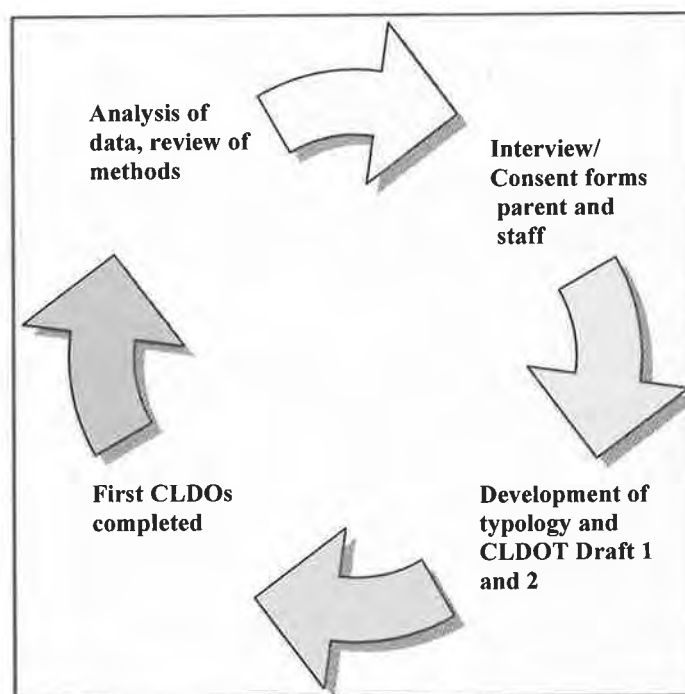


Figure 3: Diagram Showing the Cycle Involved in Phase 1 of the Research

This Phase began with the identification of eighteen children aged 24, 30 and 36 months. They were an equal mix of boys and girls. They were organised into three groups of six children, one group of children aged 36 months from the School and two groups of children aged 24 and 30 months from the Flying Start and Day Nursery settings.

It was important for the success of this research that the children's parents were involved from the start. Einarsdottir (2010, p.229) cites Siraj-Blatchford *et al.*, (2004) who acknowledge and accede that:

Parents are valuable collaborators in the preschool experience, and research has shown the importance, for children from all backgrounds, of consistency and consensus in educational aims between parents and educators.

The initial interviews and collection of consent from parents for children to be included in the study took place in September 2008. Ofsted (2011) confirmed that 'Developing parents' knowledge about and involvement in their children's learning has contributed to improved outcomes in the Early Years Foundation Stage.' It was important to me that parents were partners in this research because working with parents has always been a key feature in the development of the Centre, and the young age of the children attending has meant that any success has required the commitment and involvement of the children's families. I reported and discussed with them any significant research results during and after the research study.

The individual parent interviews were semi-structured and conducted in a familiar and comfortable environment. They included an information session, where we discussed the purpose and aims of the research, and time for the parents to share anecdotal evidence. Their consent was asked for their child to participate in the research. The interviews concluded with me asking parents questions about their children's learning. The first draft of the parent question and consent forms are in Appendix 2. I took time to ensure that carers felt at ease, offering assurances at the outset that participation was purely voluntary. All the main carers approached willingly gave permission for their children to become part of the study.

The parents were comfortable with responding to the questions about their children's learning characteristics. The only question that required further explanation was the use of symbols in play, that is, children using something to represent something else. I explained this term and the interview continued with parents giving knowledgeable and confident answers, recognising the learning feature – when it was present – in their children's play. A written explanation of this term was included in the later research in Phases 2 and 3 of the action research project.

The interviews with parents gave an additional insight into the perception of children's learning at home. It included information, from a parent's perspective, about their child's

approaches to learning and playing, their likes and dislikes and how they relied on and responded to adult attention. This provided a basis for comparing and understanding the children's behaviours at home, in the setting and during the observations. Siraj Blatchford (2010, p. 464) confirms that:

Subsequent analysis showed that the quality of the home learning environment (HLE) was indeed the most significant factor in predicting children's learning outcomes when other background factors were taken into account.

At the end of the initial interview process in Phase 1, there were some amendments made to the forms. It was necessary to include the date of birth of each child and the date completed on the interview form. This information was available elsewhere at the Centre but for the purposes of this research it was more convenient to have it all included on the data collection form. Other information appeared irrelevant, at this time, for this particular research, such as position in family. With regard to the learning descriptors on the form, it was clear that some needed a short written explanation. For example, all parents/carers required explanation of the learning descriptors, particularly the definitions of 'detailed', 'novelty', and 'explainer'. This was available for parents during Phases 2 and 3 of the research. Throughout these changes the consent part of the form remained unchanged. An example of these amendments is on the second draft of the Parent/Carer interview question and consent forms (Appendix 2 Draft 2).

Staff were interviewed simultaneously with the carer interviews. The staff interview forms underwent a similar process of change as the parent interview forms. Examples of the original (Draft 1) and amended forms (Draft 2) are in Appendix 3. The format of these was similar to the main carer interviews. They also included collecting data about children's play and learning at the setting, as well as their dependence on the adults around them.

The staff interview forms in Phase 1 included a description of children's emotional literacy, something that many of the staff were comfortable with because the emotional development of children had been studied and researched at the Centre previously. As the initial interviews with staff were completed, further discussion on emotional development resulted in the descriptor 'describe feelings' changing to 'recognising feelings'. This was more appropriate for the stage of development, of emotional literacy, that we were considering because, in my experience, children are able to recognise emotions before they are able to describe them. The term 'Not at all' was added to the descriptors because this more

accurately described the stage of development of some of the children in the research groups (Appendix 3 Draft 2). Final minor amendments were made to the form as Phase 1 of the study came to its conclusion. The heading under the General Learning Disposition was changed from 'in school observation', to 'in setting observation', and included space for recording the date of collection. (Appendix 3 Draft 2).

The first step in developing the typology of learning that later formed the basis of the CLDOT was to ask staff individually what learning behaviours looked like in children aged two to four. The questions asked during the interviews were deliberately open-ended to encourage as liberal and diverse a view of children's learning as possible. The answers involved describing how learning looked physically and how the children behaved. This led to a typology of learning dispositions derived from the experiences and knowledge of the staff and informed by the research literature (Appendix 4, Draft 1).

The most common words used to describe children's learning were: active, adaptable, apprehensive, imaginative, methodical, noisy, passive, patient and social. Staff also included children who were able to explain their thinking. They mentioned other children who flit from one activity to another and require new and novel things to keep their interest. There were those children who will only learn about the one thing that they are interested in and they often require learning opportunities that go into minute detail about the object of their interest.

The staff narratives included the skills and actions that children use to learn. However, I felt they described more than this, also touching on children's attitudes and behaviour towards the learning process and learning environment. In order to encompass all this I used the term 'learning dispositions' as previously discussed. All staff at the Centre were involved in this process and Table 4 illustrates their varied professional background. These varied backgrounds meant that my research had to bridge the gap that often exists between the childcare and educational professionals.

Staff at the Centre came from education, play and childcare backgrounds. This often meant that they were able to offer different perspectives on an idea or subject. An example of this was when I asked staff about their views on the characteristics of children's learning. Fascinatingly, it was a member of staff from a play background that emphasised some of the

positive aspects of adult-led activities. Generally it has been my experience that staff from a play background often focused more on the benefits of child-led activities rather than adult-led activities.

Table 4: Professional Background of Staff working at the Centre

STAFF MEMBER	NUMBER	QUALIFICATION
Centre Manager	1	Masters in Early Years
Deputy Teacher	1	B Ed (Hons)
Teacher	1	B Ed (Hons)
Senior Learning Support	1	NNEB, CCE, Level 4 Welsh Practice
School Nursery Nurse	1	CACHE Level 3
Learning Assistant	1	NVQ 2
Flying Start Leader	1	CCLD Level 4
Flying Start Deputy	1	CCLD Level 4
Flying Start Childcare Worker	4	CCLD Level 3 and 2 BTEC Level 2
Bear Club Leader	1	CCLD Level 4
Bear Club Deputy	1	CACHE Level 3 Play work
Bear Club Play Worker	1	CACHE Level 3
Day Nursery Supervisor	1	CACHE Level 3 Foundation Phase Degree
Room Leader	1	BSE Early Years Development
Nursery Nurse	4	CACHE Level 3 NVQ Level 3
Nursery Assistants	1	NVQ Level 2
Centre Support Qualified	1	CACHE Level 3

The typology was defined later with a more focused group interview as indicated in the flow diagram in Figure 2 and in Table 1. The groups included the classroom teacher, two nursery nurses and the Flying Start leader, on Monday 16th June 2008. We discussed the individual characteristics, deciding on a brief explanation for each. This explanation needed to be meaningful to both parents and staff. Later, because they were unable to be part of the original group, the Day Nursery Supervisor and the Out of Hours Leader added their opinions. As a result, the terms ‘selective’ and ‘routine’ were added to the characteristics. This amended document is in Appendix 4 Draft 2.

Finally, staff were asked to rate these descriptors and characteristics as to how useful and supportive the different characteristics were to children’s learning. The characteristics were categorised on this basis into three learning disposition groups: the Novice Learner (NL), the

Capable Learner (CL) and the Practised Learner (PL). Each of these categories had four or five characteristics and each characteristic had a description. The categories and their subsequent characteristics are shown in Appendix 5. These formed the basis for the categories, characteristics and descriptions of learning in the CLDOT (Appendix 6).

These categories were of course interlinked one with another. Children may have facets of a number of dispositions from one or more categories. Some dispositional characteristics have a more positive influence on learning than others, for example a child who is constantly moving from one activity to another is not concentrating on a particular learning outcome. At the same time, it is necessary for children to encounter new experiences so that they acquire the knowledge and skills they need to become successful learners. Therefore, each dispositional characteristic should not be exclusive of another; rather, aspects of each could help the child become a successful and competent lifelong learner.

The CLDOT (Appendix 6 Draft 1) became: a framework for observing the learning dispositions of children aged two to four, as well as one that categorised learners according to their learning dispositions. The CLDOs recorded the thought processes and actions of the children when involved in learning, indicated a way forward for the child, or signified the need for a change to pedagogy, curriculum or learning environment. This method places children and what they do at the heart of the learning, research and the development process.

The CLDOs began in November 2008. Each observation took about twenty minutes. The observations recorded exactly what the children did, their actions and reactions to what was going on and to staff interaction with them. These were very closely located observations because it would not have been possible to capture the facial expressions or hear the conversations from a distance. Conversations between adult/child, child/child are often quiet and intimate.

The original plan for the CLDOs was that I would be a non-participatory observer. This presented a challenge and was more difficult than originally anticipated. The children wanted to interact with me and I normally encourage this. However, this interaction would have made completing the original forms problematic in the allocated time. The observation forms needed to be less complex for phases two and three of the research, enabling interaction with the children while also collecting the relevant data (CLDOT Appendix 6 Draft 2).

The first stage in collating the data was to devise a manageable form that could hold all the initial data on each child. An example of the master data collection form is in Appendix 7. The learning categories corresponded with the CLDOT and were generally progressive stages of learning. The initial category, the Novice Learner, described a child who is just beginning to experience learning in a social setting such as Flying Start, the School or Day Nursery. The second category, the Capable Learner, described a child who is enthusiastically gaining confidence and experience as a learner. The third category, the Practised Learner, is the confident learner who is able to adapt their learning to a variety of situations and talk about the process. The second step was to identify the best descriptor that fitted each of the children from the information given by the main carer, staff member and the observational data. The process of transferring the data collected on each child was then completed.

The initial analysis, review of the data and amendments were completed by the end of February 2009. The analysis of the Phase 1 data was challenging because of the time involved in transferring the data collected to a master sheet. This problem would most likely increase further with the main research data. It was therefore practical to focus on less data for Phases 2 and 3, using only data that directly linked to the research questions.

3:4:2 Phase 2 May 2009 to July 2010

RQ 2 asked whether children change their learning dispositions according to the context of their learning. Phase 2 of this study focused on this question. Staff and parent interviews continued throughout Phase 2 as each new group of children entered the study. This Phase consisted mainly of the longitudinal CLDOs providing information on children's learning in different contexts and how each of these may have had a bearing on the learning of the child. The context for each observation varied according to:

- a) The age of the child
- b) The child's gender
- c) The learning environment, particularly inside and outside
- d) Whether the activity was adult-led or child-initiated
- e) The adults and children involved
- f) The activity itself

These variables were particularly relevant at this time, because of the continued emphasis on the importance of learning outside, and the role of play for young children in the Foundation

Phase in Wales (2008c). A picture soon developed of each child's learning, whether adult or child-led, inside or outside, and a comparison was made of any relationships discovered. One of the research children was particularly dependent on adult attention and required the same amount of adult attention in all the learning situations. Another child, who lacked concentration inside in both adult-led and child-led activities, became more involved and focused when outside, particularly during child-led activities. Figure 4 illustrates the cycle in Phase 2 of the research.

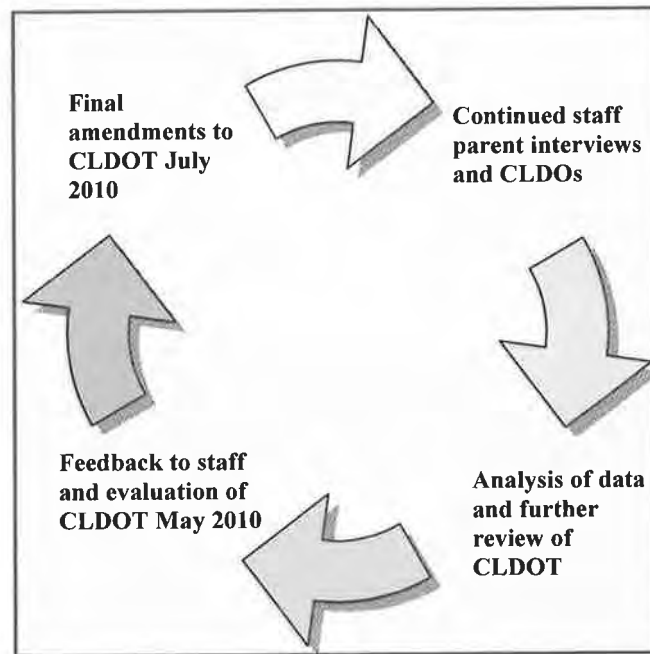


Figure 4: Diagram Showing the Cycle Involved in Phase 2 of the Research

The CLDOs completed for this research focused on activities that were adult-led or child-led and based inside or outside. These criteria were chosen because they were particularly relevant to current early years pedagogy and to the Centre. Johnson, Christie and Wardle (2005) make a connection between outside play and the development of disposition as opposed to outside play being an academic activity. The present research has informed and guided this debate at the Centre. Whether learning takes place within an adult-led or child-led activity is a fundamental pedagogical issue for early years practitioners.

Some of the observations in this research were of a child-led activity, when the adult followed the child's lead but had a planned learning outcome. Other activities were purely

adult-led. There were times, however, when an activity started out as being child-led and ended as being adult-led and vice versa. This situation is described by Martlew and Stephen (2011, p.72) who comment,

Teachers aim to achieve a balance between adult led learning, adult-initiated learning (activities with adult intentions but which the children carried out independently) and child-initiated learning (which usually involved play).

The CLDO data included the children's approach and strategies to learning, as well as how these supported the development of their individual learning disposition. The data was analysed to discern each child's overall learning disposition at each stage of the research observations. This was mainly analysed through qualitative methods but included some quantitative techniques, particularly the allocation of a tabled numerical score that was then averaged to calculate the individual children's learning disposition.

As Phase 2 progressed it became clear that the CLDOT learning categories and typology needed further research and grounding in the theory and practice of the staff at the Centre. Therefore, a set of individual interviews with staff was organised. Staff gave their permission to use semi-structured, recorded interviews. Each member of staff had five minutes before the interview began to read a set of questions and seek further clarification on any of the questions or issues evolving. The questions asked were:

- 1) Please can you describe the main characteristics of a child's learning during a teacher-led activity?
- 2) Please can you describe the main characteristics of a child's learning during a child-initiated activity?
- 3) Please can you describe the main characteristics of a child's learning during an outdoor activity?
- 4) Are you aware of any positive aspects of learning dispositions in children between the ages of 24 and 48 months?
- 5) Are you aware of any negative aspects of learning dispositions in children between the ages of 24 and 48 months?
- 6) What do you consider the four most important dispositions to enable children of this age to become successful lifelong learners?

Each member of staff interpreted the questions and gave individual answers. I was careful during the pre-interview conversations not to suggest language or vocabulary that might influence the answers.

From these interviews the CLDOT was modified. Some of the descriptors were more clearly defined and focused. Staff were very specific about how a child physically looked when learning and they included descriptions of eye contact and body language. A member of staff proposed that not playing or using their imagination could have a negative effect on children's learning. Staff mentioned the importance of giving children the opportunity to feel needed to appreciate that they are able to offer help and comfort to others.

More than one member of staff emphasised that adult-led activities have positive outcomes for children, such as more and improved questioning, listening and developing the ability to follow rules and instruction. Adult-led activities enable the 'adult' to find out about the child, to understand and explore what they know. The emphasis in Wales recently has been on child-led activities. I felt this had the potential to overshadow the fact that adult-led activities have their value in good early years practice. Recent research, for example the EPPE Project (2004), maintains that a balance is required between the two strategies to enable optimum learning opportunities.

For the first time, staff mentioned the importance of recall to children's learning. The depth of a child's recall and their ability to explore their own learning stories provides information about their level of understanding of the learning process. Further amendments were made to the CLDOT to include information about recall and the last two sections enabled the observer to comment on the level of involvement the children had with the activity and whether they had independently developed the activity (Appendix 6 Draft 3).

The CLDO data completed up to March 2010 was analysed and formally reported to staff on Saturday 8th May 2010. The feedback consisted of a three-hour training session delivered to all staff working at the Centre. I gave the initial input informing everyone of the background, methodology and initial results of my research. We then focused on the CLDOT that I had been using to date. I explained some of the problems that had occurred as I was completing the data collection sheets. These included issues about recording the intensity of a child's concentration, whether some of the descriptors needed to be separate, enabling each description to focus more on a specific area or whether to exclude some altogether.

This session included purposeful discussion and a review of the learning characteristics and descriptors on the CLDOT by practitioners. Staff modified and verified the learning

categories with their own assessments of the children and their learning. These modifications helped to further define the learning descriptions and categories so that all staff understood what they meant. We discussed the need for the comments regarding the children's well-being but agreed that these were important, as they provided key background information that might affect the approach a child might have to a given task or activity. This process also ensured that I refined my own understanding of the learning descriptions and categories and I was able to moderate the reasons for assessing certain learning characteristics during the CLDOs. This improved the reliability and validity of the observational data, increasing the consistency of the judgements.

Staff then completed one of the CLDOs using a video clip of the children at play outdoors. Further discussion arose resulting in a final amended version of the CLDOT (Appendix 7 Draft 3). As the amendments were minor, I decided that I would continue with the original sheets until I had completed the observation set I had already started in April of 2010. The amended CLDOT was used to begin the new child observations in July 2010.

3:4:3 Phase 3 July 2010 to March 2011

RQ3 asked whether we could influence a child's learning disposition by making changes to pedagogy, environment or activity. It focused on teaching and learning and began to investigate this theory. This phase of the research further developed the role of the reflective practitioner, and encouraged the children to begin to understand their own learning. This phase saw the introduction of the Learning Disposition Activity (LDA) as a research tool.

All LDAs included three stages. Stage One involved the planning and preparation for the activity and a discussion of the potential learning of the children involved. This discussion was based on each child's learning dispositions and characteristics as defined in this research. Stage Two was the reflective phase for the practitioner and observer when planning was compared to practice and further reflection took place on the child's actual learning. Stage Three involved the child and how they reflected on their experiences and discovering what they were aware of in their own learning. It included children in the evaluation and the planning of further activities and development of practice. The LDA cycle promoted the development of teaching approaches and the understanding of learning skills, as well as involving staff in talking about learning and their practice. The LDA ensured that children became more involved in the process of learning. Moyles *et al.*, (2002, p.3) support this

reflective approach to instigating change by suggesting that staff's 'inability to articulate [their own practices] may put a significant constraint upon effective pedagogical practices.'

The initial analysis of the CLDO data was used to inform some of the criteria set for the LDAs and any subsequent pedagogic changes. Phase 3 included the final sets of the CLDOs and the LDAs completed from July 2010 to March 2011, and a staff questionnaire was completed that encouraged staff to reflect on their own learning dispositions. Figure 5 shows the research cycle involved in Phase 3 of this study.

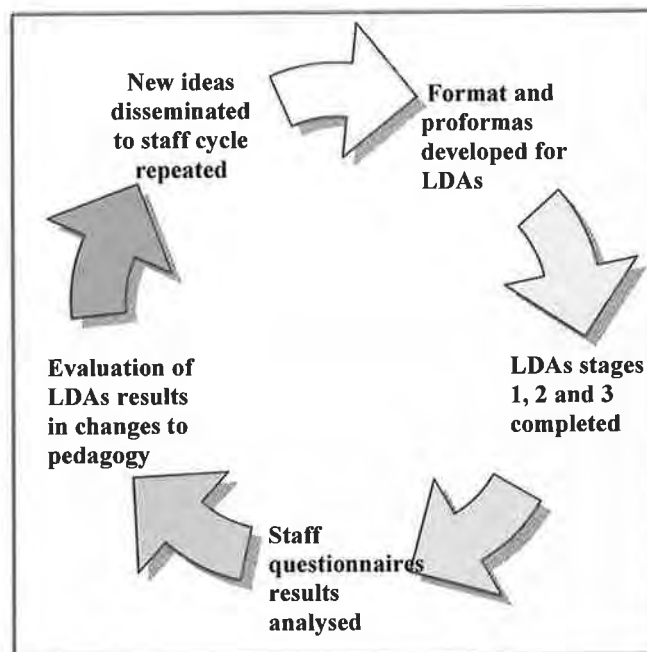


Figure 5: Diagram Showing the Cycle Involved in Phase 3 of the Research

Before the LDAs began, I discussed with staff how we might ensure that an activity gave children the opportunity to use, if they were able, the characteristics of the Practised Learner. It was imperative that each activity designated as an LDA allowed children to explore, be adaptable, solve problems, think and question, use imagination, be creative, persevere and use language to express their thinking. I then observed the activity to verify whether this had been the case. In the longer term these activities involved the adult talking to the children about the process of learning before starting the LDA activity, thus giving children the vocabulary and comprehension they needed to begin to understand the learning process. If

this were successful, then the young children would begin to understand something about their own learning processes.

When the adult was involved in an LDA, they were required to encourage children to explain their learning to others using peer learning and collaboration as a teaching tool. Carr and Claxton (2004) confirm the importance of children's communication with others as a means of supporting learning. The adult's planning took account of differentiation and how an individual child learns and arranged the activity to accommodate this. It also considered the concept of immediate or delayed gratification according to the age of the child and the known effect this can have on motivation and learning. Time was needed to allow activities to be developed by the child. Further details of the criteria for an LDA are shown in Appendix 8.

The first LDA was completed inside, where staff felt more confident to test any changes made to practice. It was also an adult-led activity as I thought this might, at first, be the best way to ensure a connection between planning and practice. The adult involved would be able to reflect intensely on their role within the planning and learning process. Completing an LDA that was child-led or developed from play, at this early stage in the process, would be a complex and unsure process and require a great deal of flexibility on behalf of the adult. At a later stage, it would be possible to apply the LDA process in a child-led activity. Walsh *et al.*, (2010, p.59) agree with this, 'Asking teachers to be more developmental and play-based in their approach is asking them to show a high level of professional skill and judgement.' The adult should always consider whether they could use a child's favourite play as a starting point for an activity. This way motivation is intrinsic and encourages children to take responsibility and interest and be involved in their own learning (Carr and Claxton, 2004).

The aim of each LDA was to make the changes necessary to improve practice. These changes were guided by the research literature. An example of one such change was for the adult to increase the amount of choice given to children, including the pursuit of an activity as well as choice within an activity. The literature supports this and details why it is good early years practice, and vital to include an element of choice in activities for children of this age. Keenan (2002) discusses the second stage of learning proposed by Erikson (1950) of autonomy/shame and doubt when 'the infant develops a sense of their independence and autonomy. However, shame and doubt in oneself may arise if the child is forced into activities which they do not choose,' (Keenan, 2002, p.22).

The CLDOs for this research helped to determine whether the learning dispositions of the children studied were relatively fixed or subject to change, as has been suggested in some of the learning style research literature. If a child's learning style is fixed then it is practical for the teacher to adapt teaching strategies to accommodate this. However, if the learner is able to use a variety of learning approaches to meet the needs of a given task, then the teacher can concentrate on encouraging the child to adapt their approach.

3:5 Conclusion

The aims of the research were to establish whether young children demonstrate any preferences for particular learning dispositions, whether this changes over time or according to activity and whether it is possible to influence this preference. The research explored the possibility of accurately observing learning disposition preferences in very young children, as well as developing a means of collecting and recording this data. The data collection spanned two years, allowing sufficient time to ascertain whether learning preferences changed over the time of the study.

The CLDOs were completed in different contexts inside and outside, adult-led and child-led, enabling data to be gathered regarding the context and type of activity the child was engaged in. To ensure that the data collected met the aims of the research, it was essential to consider how to describe and categorise young children's learning. This learning typology had to be consistent and manageable and was an essential part of the research design. The literature review established how other researchers have previously dealt with this problem. Most of the approaches used to test and measure ability, or understand learning or learning styles, depended on the verbal and cognitive abilities of the participants. Many therefore were from an older age group than the one in this research, for example, Dunn and Dunn (1978) used mainly interviews, observations and questionnaires.

This methodology would not be suitable in the early years because the children involved would not be able to answer a traditional written questionnaire or be comfortable in a formal or semi-formal interview situation. The age of the children involved in this research was central to the chosen methodology and the focus on observation. The age of the children also meant that full implementation of Article 12, United Nations Convention on the Rights of the Child (1989) requires recognition of, and respect for, nonverbal forms of communication

including play, body language, facial expressions, drawing and painting, through which very young children demonstrate understanding, choices and preferences.

This research used an action research model comprising three phases. Phase 1 involved the development of the CLDOT, Phase 2 further refinement and use of the CLDOs and Phase 3 completion of the longitudinal observations with the CLDOs resulting in the development and implementation of the LDAs. The development of the CLDOT relied upon the input of the staff at the Centre and began with their ideas about learning. The CLDOs placed the children at the Centre of the research. The LDA cycles were an important element of the methodology for this research. They brought together the staff, the children and the researcher in a reflective cycle that initiated the change necessary for the completion of, and beginning of each new action research cycle. All these aspects have made this research unique, personal and valuable to those involved.

The following Results chapter investigates and analyses the research data, focusing on how children learn and their learning dispositions. It considers what they have to say about their learning. The chapter begins to explore the role of the adult in the learning process and how pedagogy might change to become more effective and to further meet the learning needs of the children. This process is ongoing because, as the research methodology developed and refined, so did the involvement of practitioners with play and its place in Centre pedagogy. This process is confirmed in the LDAs and their development at the Centre into the focus of a professional learning community.

CHAPTER 4 Results

4:1 Introduction

In this chapter the research data is analysed and discussed. The chapter is divided into three sections corresponding to the three phases of the research. Each phase was connected to answering the three main research questions. Phase 1 focused on Research Question 1 (RQ1), Phase 2 Research Question 2 (RQ2) and Phase 3 Research Question 3 (RQ3). The research tested the learning descriptors by direct observations of the learner's behaviour whilst learning. The learning descriptors and dispositions originated from the observations and experiences of the early years professionals employed at the Centre and therefore were already connected to the pedagogy of the setting.

All children attending the Centre were, before this research began, subject to a variety of observations and assessments. These included the Schedule of Growing Skills II Assessment (1996), three Baseline Assessments (1999) a Soft Skill assessment (2007) and a variety of other formal and informal observations used for summative and informative purposes. Some of the tests assessed the children's progress in various curriculum areas or developmental milestones; others on their pro-social abilities. I wanted to develop an observation tool that focused on how children learn, what children do when they are learning and how this can be influenced by themselves, staff and their environment.

During the research 20 separate Child Learning Disposition Observations (CLDOs) were completed on each child. This matrix of observations was important in ordering the data and allowing comparisons and deductions to be made. These forms and the data contained have been used to calculate the percentages and overall learning categories for each child in the result tables. As explained in the previous chapter, the learning disposition categories were Capable Learner, Practised Learner and Novice Learner. The individual characteristics of each of the learning disposition categories can be seen in Appendix 5.

4:2 Results Phase 1

Phase 1 tested the proposed research methodology and focused on RQ1. *Can we identify, observe and understand learning dispositions in children aged two to four years?* This stage

concentrated on the identification and observation of learning dispositions and contributed to my understanding of the learning of children aged 24 to 48 months. Karlsdottir and Gardarsdottir (2010, p. 256) describe positive learning dispositions with ‘the child as a learner, who is interested, involved, persists with difficulties or uncertainty, communicates and takes responsibility.’ At this stage the typology of learning dispositions and the Child Learning Disposition Observation Tool (CLDOT) used in the research were defined and tested in practice.

RQ1 at first seemed the easiest of my questions, but it involved one of the longest, most changed and reflected upon processes in my research. This question was answered through the CLDOs. I was initially confident with my methodological tool, the CLDOT, but once the research began the typology included in the tool went through a number of changes until it was settled in the final sets of CLDOs. The development of the learning typology and the CLDOT involved all the staff at the Centre and, once finalised, it proved to be constructive and reliable. This was an unexpected beneficial learning experience for me and for staff.

The data collected from the CLDOs, staff and parent interviews is in Appendix 9. This includes the baseline and soft skill data. The assessment data contained in these sheets has been summarised in Appendix 10. Table 5 below is a synthesis of the material in Appendix 10, which shows all the research children’s learning disposition categories as identified from their CLDOs and their overall learning disposition after the research observations had been completed.

The first column identifies each child; the second column shows the child’s learning dispositions as detailed in Appendix 9. For example, Group A Child 1 Observation Set 1 results were: Inside adult-led two assessments as a Novice Learner category results in an overall Novice Learner Category; Inside child-led 1 assessment in the Novice Learner category, 2 assessments in the Capable Learner Category and 2 assessments in the Practised Learner category results in an overall Capable Learner category; Outside adult-led 2 assessments in the Novice Learner category, 2 assessments in the Capable Learner Category and 1 assessment in the Practised Learner category results in an overall category of Capable Learner/Novice Learner; Outside Child-led 1 assessment in the Novice Learner category and 2 assessments in the Capable Learner category results in an overall category of Capable Learner. This data has been transferred to the first column in Table 5. The third column

shows the child's overall learning category after all the research observations had been completed, synthesising the findings arising from the longitudinal data.

The numbers indicated in Column 1 reflect the fact that some children for various reasons had to leave the research before completion. Originally there were six children in each group. Groups A and E reduced to three children, Group B to four children, Group D to five children and Group C finished the study with a full cohort of six children.

Table 5: Children's Learning Dispositions

Child	First Learning Disposition Category			Overall Learning Disposition Category
1A	2xNL	3x CL		CL
5A	4xNL		1x PL	CL
6A	4xNL			CL
1B		4xCL		CL
4B	4xNL	3x CL		CL
5B		4xCL	3x PL	CL
6B		4xCL	2x PL	CL
1C	1xNL	4xCL	3xPL	CL
2C		4xCL		CL
3C		4xCL	2xPL	CL
4C		3xCL	1xPL	CL
5C		3xCL	1xPL	CL
6C	1xNL	3xCL	1xPL	CL
1D		3xCL	2xPL	CL
2D		4xCL	1xPL	CL
4D		3xCL	1xPL	CL
5D		3xCL	2xPL	CL
6D	2xNL	4x CL	1xPL	CL
1E	1xNL	4xCL	1xPL	CL
2E		3x CL		CL
3E		4xCL		CL

One of the inside observation activities in which the children were involved was to play with 'gloup' and a range of containers. A problem was established as to how to transport the 'gloup' from one container to another. The Novice Learner (Child 5A) approached this activity and explored the 'gloup' from a sensory perspective, played in parallel by the side of the other children and forgot about the task set. The Capable Learner (Child 2C) explored the 'gloup' for a short period of time, having experienced the 'gloup' many times before starting to use a spoon to try and transport the 'gloup' from a large container into a smaller one. He did this on his own at first and then other children became involved after watching what he

was doing. The Practised Learner (Child 5B) played with the 'gloup' for a short time then tried to tip the 'gloup' from the smaller container into the larger one. He then engaged the help of a friend to scrap the 'gloup' from the sides of the smaller container with a spoon until it was almost all in the larger container. The children spoke about this together and discussed the properties of the 'gloup' as it was moving from the one container to another. This session ended with the teacher explaining in an appropriate way to these children what was happening to the molecular structure of the 'gloup' as it moved from a solid into a more liquid form.

A second illustration of an outdoor activity was when the children went to the woodland to look for worms after reading and talking about worms in the classroom. The Novice Learner (Child 3D) stayed near the adult's side and was not confident enough to participate in the activity independently. (Child 1B) was assessed at the Capable Learner level for this activity because, once in the woodland, he moved away independently, began looking for worms under stones, etc. and engaged the attention of the nearby adult upon finding a worm. When the adult approached, the child began to talk about the worm and repeat some of the information that had been explored in the classroom. The Practised Learner (Child 1C) entered the woodland and explored as the Capable Learner, but once he had found a worm he engaged with a group of peers, they watched the worm move and talked not only about the information they could remember from the classroom but what the worm might be doing. Child 1C only called the adult when they wanted to pick the worm up and wanted to know how it would dig its way back under the ground if they left it on the surface.

The initial carer interviews of Group A took place in September 2008 with additional groups joining the study at three monthly intervals. Table 6 shows the learning category of each of the children in Group A as described by their main carer, early years practitioners and child observations. Tables 6 to 8 present each child's learning at home and in the setting. When the data in these tables was compared, it was interesting to note that staff and parents/carers agree in over 59 percent of the data sets. The tables indicated a shared understanding of the learning categories between the early years professionals and the children's main carers, thus illustrating the common ground that can exist between professional and carer. Desforges and Abouchaar (2003, p. 86) suggest that:

Of the many forms of parental involvement, it is the 'at-home' relationships and modeling of aspirations which play the major part in impact on school outcomes.

Involvement works indirectly on school outcomes by helping the child build a pro-social, pro-learning self-concept and high educational aspirations. Schools are more likely to involve parents in supporting the school as an institution, with less impact on children's educational success.

Table 6: Learning Disposition Research Children aged 24 Months September 2008

Identification	Parent/ Carer Home	Staff Centre	Researcher Observation 1 Centre	Overall Disposition
Child 1 Group A	CL/PL	CL	CL	CL
Child 2 Group A	CL/PL	NL	PL	PL
Child 3 Group A	CL	CL	CL	CL
Child 4 Group A	CL	PL	CL	CL
Child 5 Group A	CL/PL	CL	PL	CL/PL
Child 6 Group A	NL	NL/PL	CL/PL	NL

Table 7: Learning Disposition Research Children aged 30 Months November 2008

Identification	Home	Setting	Observation 1	Overall Disposition
Child 1 Group B	PL	CL	CL	CL
Child 2 Group B	PL	NL	CL/PL	PL
Child 3 Group B	CL/PL	CL		CL
Child 4 Group B	PL	NL/PL	CL/NL/PL	PL
Child 5 Group B	CL/NL	CL/NL	NL	NL
Child 6 Group B	PL	CL	CL	CL

Table 8: Learning Disposition Research Children aged 36 Months February 2009

Identification	Home	Setting	Observation 1	Overall Disposition
Child 1 Group C	CL/PL	CL	CL/PL	CL
Child 2 Group C	CL/PL	CL	CL	CL
Child 3 Group C	PL	NL	CL/NL	NL
Child 4 Group C	NL/PL	NL	NL	NL
Child 5 Group C	CL/PL	NL	NL	NL
Child 6 Group C	PL	CL	CL	CL

The overall learning category for each child has been derived from matching the observational data of the children learning with the learning typology (categories and characteristics) found in the CLDOT devised for this research. The child's learning category was the one with the most matches that described that child's learning. The following is an example of this. Child 1 Group A was grouped as both a Novice Learner and Capable Learner at home, a Capable Learner by staff and scored 3x Novice Learner and 4x Capable Learner in the first observations – therefore the overall learning category was Capable Learner. A further example is Child 3 Group A; overall category was a Capable Learner

consisting of Capable Learner at home, Capable Learner by staff at the Centre and 2x Novice Learner and 3x Capable Learner in the observations. The observations were completed of children at play; jumping on a trampet and involved in adult-led activities; joining a duck hunt, painting with wellingtons in the garden and completing a matching activity.

Tables 6 to 8 confirmed that the adults' perceived understanding of a child's learning was supported by the research observations. The data also showed that there was over 66 percent agreement between the first CLDOs and the parent/carers observations and 84 percent agreement between the CLDOs and the staff assessments of the children completed for this research. Furthermore, when staff discussed the data they agreed that the descriptors aptly described the learning of that particular child. These results supported staff assessment and contributed to the robustness of the data. This is a further example of the practice at the Centre helping to inform and support the research.

The tables also indicate that as the children mature, and they attend school, so does the number of children in the Novice Learner category. There are over 50 percent Novice Learners in the first school age category. At the first stage of the research, I was unsure if this was due to the particular children in the groups, or connected to the differing expectations between school and pre-school settings, or to staff expectations, or even – however unlikely – to a decreasing skill competency level of the children. At this early stage it was difficult to draw any conclusions until all research data had been collected, studied and analysed.

The tables collating the data on the children's play characteristics and summary overview are in Appendix 11 (Groups A to C). These focused on children's likes, dislikes and their favourite play. They indicated, for example, whether children enjoyed active play, or play such as table-top activities. The tables showed whether children were using symbols in their play and whether they had the creativity or imagination to use representational objects. This information helped define the developmental stage of each child.

There were no gender differences in the active play category and all the children enjoyed this type of play. The imaginary play, however, clearly showed a gender bias with girls' role playing 'mam' at home, looking after the baby and dad leaving the home to act out something else. In nearly all areas, there was consistency between home, setting and the observational

data. The descriptions of the play given by professionals included comments about the stages of play and the attitude of the child to the situation, as well as describing their actions. During Phase 1, I studied the Schedule of Growing Skills (SOGS) assessments data for the first group of children. This assessment is carried out by health visitors on all babies and young children at home from the age of six months to 60 months. It is used by the Health Service to identify any developmental issues that may occur in some children. The data is recorded on the master data collection form (Appendix 7).

More importantly, at this stage in Phase 1 of the research, the early data analysis seemed to corroborate that the learning descriptors accurately described the children involved. For example, Group D Child 1 was a child who was categorised at school as one of our 'more able learners' and was never categorised for the research as a Novice Learner. This would also have applied to Group C Child 4 or Group B Child 1, and many others. Group C Child 5 had some of the characteristics of the Novice Learner throughout the two years of the research and this confirmed his need for constant adult attention and being very dependent on one friend. This information confirmed for me that my methodology was practical and would yield useful data. The amendments of the CLDOT are in Appendix 6. The final amended version was used for the CLDO in Phase 2 of the research.

The success of this phase verified that it was possible to observe and describe young children's learning dispositions as defined for this study. This helped determine whether an adult could facilitate and adopt strategies to encourage the learner to develop the characteristics of a 'Practised Learner' i.e. explainer, adaptable, thinker, methodical and imaginative. This, however, could only happen if a child was at an appropriate stage of development.

Children, as well as acquiring the desirable characteristics of the Practised Learner, should, ideally, maintain some of the positive characteristics of the other two categories. For example, while it may not be good for a child to move constantly from one activity to another, an element of this sense of curiosity is necessary to make learning possible and enjoyable. Every child needs to maintain a degree of apprehension because this is what can keep them safe in new and challenging situations. The categories were hierarchical, but not exclusively so and, from the observations, children displayed aspects of all characteristics dependent on the context and the task. A child may have displayed the characteristics of a

Practised Learner at one task, because it may have been a task they were interested in or had experienced before. The same child may have shown the characteristics of a Novice Learner in an activity that was new and unfamiliar to them.

Phase 1 provided the early years staff with a benchmark from which a child's learning could be assessed and followed. It enabled me to identify and become familiar with the methods and design for this research. This process highlighted the necessity to reduce and refine the amount of data collected in the study so that it became manageable. This ensured a closer and clearer focus on the research questions. The data collected answered RQ1 whether we could reliably identify and observe learning dispositions in children aged 24 to 48 months within the different contexts set for this research. The data analysis revealed that the children's observed learning behaviours matched those identified by staff and parents and developed into the learning disposition categories and descriptions used in the CLDOT.

4:3 Results Phase 2

Phase 2 focused on Research Question 2 (RQ2) *Do young children change and develop their learning dispositions with age or adapt them to different situations or activities?*

The CLDOs were critical to answering this question. They proved to be the most time-consuming of the research activities. The answer to this question was complex because my data suggested that children do change their learning disposition with age but not in a consistent manner. The Novice Learner to the Capable Learner seemed more consistent than the Capable Learner to the Practised Learner. This second progression appeared to be affected by the learning activity, environment and interaction with the adult involved.

This phase particularly concentrated on the observation and understanding of learning dispositions in young children. The CLDOs were completed over two years and in four different contexts. The typology of learning dispositions and characteristics created by the staff were tested and proved both valid and practical during Phase 1 of the research. The CLDOT was revisited and revised by staff individually, in small groups and as a whole in the feedback session to staff in May 2010, when it was tested by all staff who completed a CLDOT using a video of the children playing outdoors as the observation material. This was a good example of practice informing theory as the CLDOT used in this research was developed from the practice of the staff.

This involvement at the very beginning gave staff the confidence to use and complete the child observation sheets in Phase 2 of the research. One new member of staff commented that she found the observation easy to complete because the descriptors gave her something to focus on and write about. Importantly, the observation criteria proved viable during both adult-led and child-led activities. This aspect was important in facilitating the consideration of learning in both contexts. Observing the learning environments of inside and outside and the contexts of adult or child-led worked well. This process of observation has proved crucial to how staff have begun to think further about and understand young children's learning.

During Phase 1, my own identification, observation and understanding of learning dispositions in young children developed sufficiently so that I could confidently approach Phase 2. The learning categories in Tables 9 to 11 are a result of the most common category for each child in each of the four different observations, adult-led inside and outside, child-led inside and outside. As can be seen from Table 9 below, Child 6A has moved from being a Novice Learner at 24 months to a Capable Learner at 54 months.

Table 9: Example of One Child's Learning Categories from 24 to 54 months

Child	Age in Months	Overall Learning Category	Learning Journey
6A	24 30 36 42 48 54	NL CL CL CL CL PL	NL 24 months no NL categories after 36 months consistent PL by 54 months

The Novice Learner category appeared to be connected to the amount of time a child has spent in the setting and their confidence level. Rarely did the Novice Learner category appear after the first set of observations of a child. The most consistent category for all children was the Capable Learner. This had implications for practice as it indicated that we were successful at enabling children to progress from the Novice Learner to the Capable Learner. There was, however, more inconsistency between the Capable Learner and the Practised Learner category. Children moved back and forth between these two categories depending on the activity and the learning environment.

Table 10 shows two of the children, 5A and 6A, who started at the Centre in the Novice Learner category (both children had attended the Flying Start setting). Child 5A had just started attending the setting during their first CLDO cycle. The activity was a 'duck hunt,' it was adult-led, starting inside and then moving outside. The child was not interested in the

activity, even though it was a fun and active experience. She pursued her own agenda looking at photographs. Child 6A was attending the school setting and had therefore already been attending the Centre for about 9 months. The activity was child-led but not originally organised by child 6A. Child 6A was not interested in the play however, staying on the periphery and seeking adult attention. There did not appear to be any pattern presented through the activity or learning environment for children to score in the Novice Learner category.

Table 10: Two Children's Learning Journey from NL to CL and PL

Child	Age in months	Overall Learning Category	Learning Journey
5A	24 30 36 42 48 54	NL CL CL CL CL CL	NL only appears at 24 months and as elements of the NL decreases the CL increases by 48/54 months the PL category consistent during LDA Cycle
6A	24 30 36 42 48 54	NL CL CL CL CL PL	NL 24 months no NL categories after 36 months consistent PL by 54 months

However, as shown in Appendix 10, all children progressed during the time of the observations from the Novice Learner towards the Capable Learner and Practised Learner. 50 percent of children progressed to become Practised Learners and 50 percent Capable Learners. In most cases these percentages reflected the children's maturity and stage of development. The aspect of maturity is discussed in the research literature where Reid (2005) suggests that learning occurs in age-related stages or even, as Kolb (1976) proposes, learning dispositions may change with the time of day. Table 11 shows that not all children, even at 24 months, start from the same stage with 25 percent of children displaying the characteristics of the Novice Learner at 24 months and 75 percent of the children being Capable Learners.

Table 11: One Child's learning starting at the CL Level

Child	Age in Months	Over all Learning Category	Learning Journey
1C	24 30 36 42 48	CL CL CL CL NL/CL	NL characteristics up to 48 months observation. Gradual increase to consistent CL Last observations indicated requirement for adult guidance

One child started at 24 months with the characteristics of a Capable Learner and in the final observation at age 48 months displayed some of the characteristics of the Novice Learner and the Capable Learner. This child can sometimes find it difficult to concentrate and will only focus on something that interests him and he likes adult attention. Unfortunately this activity did not capture his attentiveness and, as he was working in a small group, he did not have 1:1 adult attention.

The results as shown in Appendix 10 indicate that the characteristics of the Practised Learner and Capable Learner intermingle more and over a longer time span than the Novice Learner and Capable Learner. The categories of Capable Learner and Practised Learner are not so closely connected to the age of the child and seem more closely connected to the learning developmental stage of the individual. Generally, the observations showed that children's progress was more clearly connected to age when learning was planned through an adult-led activity. This required the child to interact directly with an adult. This social interaction requires a degree of maturity from the child that usually comes with experience and age. When I observed children playing alone or with others, they often showed a particular learning skill or disposition at a higher level than in an adult-led activity. Featherstone (2012) affirmed this in her keynote speech by saying, 'Children at play, often display the highest developmental level rather than in adult-led.' This situation does not have the added requirement of responding to an adult about something that may or may not have been of interest to them. Progress shown and connected to a child's learning disposition was very much influenced by the adult's choice of activity. There are also the instances, as with Child 5A, when an activity that might have appealed to this child was unsuccessful because the child was not settled into the learning environment.

The answer to the first part of RQ2, whether children change learning dispositions according to age, was that this appeared to be the case. The change, however, was not consistent and may have been connected to several factors in addition to age, such as their level of security, confidence and independence or their stage of development. The progress between the Novice Learner and Capable Learner appeared to be closely connected to the age of the child. This, in turn, was closely connected to their level of independence. The movement between the Capable Learner and the Practised Learner was more fluid and appeared to be connected to the children's learning dispositions and perhaps to how they understood learning. Whitebread *et al.*, (2005) and Smith *et al.*, (2003) confirm the connection between how

children understand learning and their ability to learn. An example of this was when Group D Child 1, during the Learning Disposition Activity recall session, was able to begin to talk about the learning process to me. Children's learning disposition was also connected to, and influenced by, the activity and the learning situation. A further example of this was with Group B Child 4, who consistently displayed changed characteristics between learning and playing in the inside and the outside.

During the two years of the study, the implementation of the observation tool was further refined. One example of this process was the setting of 85 per cent as the benchmark for a child to meet the characteristic of being engaged with an activity. This was decided at the feedback sessions to staff in May 2010. We considered some of the work on involvement by Laevers (1994) and our own expectations and experiences of the young children attending the Centre in making this decision.

The CLDOs focused on two environments: inside and outside, and two different contexts, adult-led or child-led activities. 66 percent of the children displayed no Novice Learner characteristics in any of the contexts used for the child observations. As can be seen from Table 12, there were only two occasions when children displayed all learning categories in one activity. This was a woodland activity when the children were collecting leaves to compare and contrast. This may have involved the child in an environment in which they did not feel confident, but in an activity that they enjoyed and were able to think about and question.

Table 12: Example of Children using all Learning Categories in one Activity

Child	Over all learning category from 4 observations				All children's learning categories as recorded on master collection sheet
1C	CL	CL	CL	CL	1 st observations 4x CL 1x PL inside adult led 2x NL inside child led Child showed 3 learning categories in 1 activity.
6D	CL	CL	CL	CL	1 st observations 2x CL 1xNL 1x NL/CL/PL No PL categories Child showed 3 learning categories in 1 activity

There is one example of a child (4C) who shows a strong preference for learning inside. All this child's practised learner characteristics were connected to being inside, involved in a

child-led activity. It was possible that this child did not like being outside, or was a more secure and independent learner when inside.

Table 13: Example of Child with Strong Preference for Learning Inside

Child	Over all learning category from 4 observations				All child's learning categories are recorded on master collection sheet
4C	CL	CL	CL	CL	1st observations 3x CL and 1x PL 4x PL inside child led No N/L categories

The individual child data collection sheets (Appendix 11) show that outside, children demonstrated characteristics of the Practised Learner nine times in a child-led activity and seven times in an adult-led activity. There does not appear to be any significant difference in learning categories outside whether it was a child-led or adult-led. Inside the Practised Learner appeared fifteen times in a child-led activity and eleven times in an adult-led activity. The difference between the Practised Learner category in the adult-led and child-led was trebled on the inside as opposed to the outside. On this calculation the Practised Learner category appeared 16 times outside and 26 times inside. It does, however, indicate that children's learning dispositions are only marginally different between the inside and outside; in fact, they appear to show more Practised Learner skills inside than out. I think it is worth questioning what sort of learning we are expecting from our children when they are outdoors and whether it should be the same as indoors. This research would suggest that the two environments are suited to different types of learning and activity.

The Practised Learner category appeared 24 times (15 times on the inside plus 9 times on the outside) in child-led activities both inside and out and 18 (11 times on the inside plus 7 times on the outside) times in adult-led activities both inside and out. Early years theory and practice would support this finding, for it is through children leading the learning that they learn the most. The Welsh Assembly Government (2008, p.5) supported this belief in early years pedagogy when they confirmed,

Children's learning is most effective when it arises from first-hand experiences, whether spontaneous or structured, and when they are given time to play without interruptions and to reach a satisfactory conclusion.

4:4 Results Phase 3

Phase 3 focused on Research Question 3 (RQ3) *How is it possible to adapt pedagogy to influence a child's learning potential through understanding their acquisition and use of learning dispositions?* The process of connecting children's learning dispositions with children's voice and improvements to pedagogy required a great deal of deliberation and thought. This concept was, however, the crux of the change aspect of my research.

The first Learning Disposition Activities (LDAs) were completed initially with the teaching members of staff with a view to dissemination to all Centre staff. This cycle of LDAs focused on both child observations and teaching strategies in the four contexts of the research. Samuelsson and Sheridan (2010, p.225) write:

Today we know that learning is a complex task, and that teachers need to be active not only in providing a learning environment but also as communicative partners in children's everyday life in preschool.

This process confirmed for me that the same system could be used throughout the different focused areas of adult-led or child-led, inside and outside. The activities were reflected upon and evaluated at every stage by myself and the staff involved. Minor adjustments were made to both practice and observational criteria where appropriate, considering current early years pedagogy, our own increased knowledge resulting from this research and the combined knowledge and experiences of those involved.

The research sought to improve and adapt teaching strategies by raising awareness amongst staff of how children learn and how we can help children understand more about their learning. This phase particularly emphasised the importance of staff development through reflection. Examining my final research question has involved the Early Years Centre staff and me, as Centre Manager, in a considerable amount of thought and reflection. The research study and literature on the reflective practitioner have supported and informed these deliberations. They have been given practical application through the research methodologies.

The LDAs in Phase 3 were implemented for both adult-led and child-led activities. If the activity was adult-led then it should connect with a child's individual interests and include an intrinsic reward. This was planned to gain the involvement and motivation of the children.

The activity should meet certain criteria as identified in the first draft of the LDAs in Appendix 8. The adult should have considered the learning disposition of the child before planning the activity. An example of the process involved in an adult- led LDA is shown in Figure 5.

PREPARATION <ul style="list-style-type: none"> ➤ Discussion and assessment of child’s learning disposition including how the child is likely to connect to activity ➤ Discussion about appropriate activity to allow child to use high-level learning characteristics/category ➤ Discussion about the learning that is expected from the activity ➤ Discussion on the necessary learning techniques and skills involved in the task
DELIVERY <ul style="list-style-type: none"> ➤ Input from the adult including learning techniques and skills involved ➤ Child’s reaction and interaction ➤ Open-ended questions from the adult ➤ Observation of activity
REFLECTION <ul style="list-style-type: none"> ➤ Discussion about the child, the activity and the learning ➤ Comparison between the learning expected and the actual learning ➤ Dialogue between adult and child about activity and learning including discussion about child’s metacognitive understanding ➤ Dialogue about the way forward for both adult and child

Figure 5: Example of an Adult-led LDA

The preparation by the adult and dialogue between adult and child at the beginning of the activity was very much influenced by the criteria set out at the end of the literary review. The third stage of the LDA is steeped in the literature and research on the reflective practitioner. The qualities of the reflective discussions are informed by the theories and pedagogy that arise from the Reggio Emilia schools and other good practice theory, as discussed in the literature chapter.

The second stage of the LDA involved the practitioner in a process of reflection on the teaching and learning that took place during the activity. It compared planning and subsequent practice. Peters and Davis (2011, p7) mention this inconsistency and cite ‘There may be many issues and dilemmas to consider in negotiating the gap between ‘hope and happening,’ (Kenway and Willis 1997, cited in Brit and Sumsion 2003, 116). It involved the

practitioner in analysing an activity in detail from the perspectives defined in the learning disposition characteristics.

The third stage of the LDA involved the child and sought to obtain their views on the learning process. It recorded what children understood was happening during the learning and what they thought about it. Finally a section was included on the record sheet, to ensure that adults consulted with and were open to the possibility of the activity being changed or developed by the child. This stage of the LDA is also closely linked to the importance of 'children's voice' as established in the UNCRC (1989) and formally adopted by the WAG 2004, becoming statute in March 2011. This phase of the LDA explores children's views about their own learning and is closely linked to helping them gain metacognitive awareness, experiences and understanding.

The first sets of LDAs were completed in July 2010. Initially the LDAs involved both teachers from the school setting. This process later included the team leaders from the other childcare settings at the Centre. The children in groups B, C and D were taking part in their final CLDOs and, as part of these, each child completed an LDA. These children were aged 48 months. The results of these observations and activities are in Appendix 10.

The second set of LDAs was completed in October 2010. When we reflected on these as a staff we were surprised to discover that many of the adult-led activities did not allow the children the opportunity to engage with the learning criteria identified as important to an LDA. Some of the activities engaged with some of the criteria, but not enough to satisfy our aspirations. There was no doubt that our children were learning, but not in the depth that we would have wished and they were not learning about learning. The third set of LDAs was completed in early 2011. The process now required the practitioner to reflect on any missed learning opportunities identified after the LDA had been completed and to use this information to identify the way forward for the activity. This was something that the adult would address with the child as a follow-up activity. It involved the child in reflecting on their own learning. This was a major step in the action research process because it involved discussing learning not only amongst ourselves as staff but with the children too. The aim was that the children would begin to develop a vocabulary that would enable them to discuss their learning and the learning processes.

Table 14 records the LDAs and whether the planned learning opportunities matched the actual learning that took place during the activity. The observational data indicated that the children may have scored more if the only aspect considered had been thinking. The children generally found asking questions difficult, even though it could be seen that they were thinking about an activity. There was only one occasion when a child asked their own questions during an adult-led activity. This was the same whether the activity was adult-led or child-led, inside or outside. The implication of this was that we needed a focus on what could be done to encourage and enable children to ask their own questions.

Table 14: Comparison of Planned and Actual Learning Opportunities in LDAs

Activities when planned and actual learning matched. Adult-Led 25 LDAs completed		Activities when planned and actual learning did not match. Child-Led 25 LDAs completed	
Making choices	12	Making choices	25
Making mistakes	9	Making mistakes	3
Being responsible	5	Being responsible	16
Being intuitive	1	Being intuitive	2
Problem-solving	7	Problem-solving	10
Thinking and questioning	1	Thinking and questioning	8
Using imagination	2	Using imagination	12
Being creative	1	Being creative	6
Exploring	11	Exploring	18
Being adaptable	1	Being adaptable	4

The numbered column indicates the amount of times children had the opportunity to practise the skills indicated out of the 25 LDAs. An example for line one, 'making choices', would be that, out of 25 adult-led LDAs, the adult had planned for children to make choices during 25 of these activities, but this only happened in practice during 12 of the activities. Table 14 shows that children adapt their behaviour more readily and are willing to conform more to requests from their peers when involved in an adult-led activity. Children sometimes answer questions through their actions and not verbally. An example of this was observed when two children were trying to make a home for a bird. They were asked questions by the adult present about their work. Sometimes they answered but other times they showed their response in actions. Adults in this situation can help children by verbalising answers or modelling questions.

The results showed that there were some examples of adults closely identifying predicted learning opportunities with practice and other examples when the predicted learning did not

correspond to practice. It was my experience that this lack of correlation was improved by the discussions that arose through the LDA process. During these discussions, adults recorded what they knew about a child's learning. They reminded the adult to talk to the children about learning and this in turn helped children to understand more about their own learning. It made the children more aware of how to make the most of the learning opportunities presented to them.

There was a close link between the predicted learning opportunities and the observations in the adult-led activities in the areas of making choices and exploring. However, the choices were connected with choice *within* the activity not what the activity might be. There were five occasions when the learning opportunities identified by the adult were not followed up by the children. This clearly needed more exploration and further changes made to practice to improve on this result. It was my experience during the observations that the problem-solving resulted from adult questioning, regardless of whether the child was involved in an adult-led or child-led activity. Einarsdottir (2010, p. 238) comments that:

The pre school teacher should be attentive, always prepared to provide stimulation and to take part, but only in accordance with the wishes of the children. In this way, the teacher provides security, can spark interest, answer questions, enquire and inform the children.

This describes the adult's role in facilitating children's learning in a child-led activity by talking to the children about their activities and encouraging them to verbalise their learning.

The choice in child-led activities is intrinsic and only limited by the possibilities offered in the environment and the children's imaginations. There were examples of every learning disposition category in both child-led and adult-led activities. The table included three examples of areas of identified learning opportunities by the adult that were not followed by the children. The reasons why this happened would need further investigation. What is clear from this research is that children do not see themselves as making mistakes in activities that they have control over.

The third stage of the LDAs focused on finding out and analysing what children know and think about their own learning. Narrative information was collected on what children were able to recall about an activity and their learning the day after an activity was completed. The analysis divided the recall into two areas, 'good recall' and 'modest recall'. Good recall was

categorised when a child could remember three facts or more, while modest recall featured two facts or less. There was little difference between the recall of an adult-led or child-led activity. From a total of 21 activities, 10 children had good recall, five children had modest recall and six children had no recall of either activity or learning. This adds weight to the learning disposition activity work on helping children to learn about the skills they may need to improve memory and memory retention in Appendix 8.

A further observation was that, in one particular activity, the recall of a child who was actively engaged in an activity was less detailed than a child who had been quite passive during the activity itself. These same children had better recall of a story stimulus rather than of the practical activity. The story may have provided stimulus for the imagination even though it was not an active experience. Most research on learning would suggest that practical experience and action are needed to reinforce learning. The Welsh Assembly Government (2008c) refers to play as children's *active* involvement in their learning and to the needs of the kinaesthetic learner. Edwards *et al.*, (1998) refer to how children use action to learn and understand. This particular example suggests the action does not have to be physical but could involve engagement of the imagination or mind, such as quietly listening to a story. Table 15 shows the results of the discussions I had with the children about their understanding of learning.

Table 15: Summary of Children's Metacognitive Understanding

Number of responses indicating children who thought they were good learners	17
Number of responses of children who thought learning was easy	11
Number of responses of children who thought learning was hard	11
Number of responses of children who understood that others help you learn	13
Children who are unable to comment on why they want to learn	20
Children who were able to comment on why they want to learn	1
Children who are unable to comment on what they know about learning	13
Children who were able to comment on what they know about learning	8

I wanted to try and understand the learning process in the settings from their perspective, to try and discover what they know about learning, and to give them a valued 'voice' in our setting. It was important to my research to discover whether the children could verbalise

about the learning experiences they had encountered whilst at the Centre and whether they had developed any metacognitive understanding about how they and others learn. I did this with 21 children from the research group, aged between 36 and 48 months. The information in this table records the children's metacognitive understanding, that is, how children feel about learning, how they think they learn and what helps them learn. Hargreaves (2005, p.7 and 18) considers metacognitive understanding to be vital to the learning process:

The core of learning is meta cognition...Much of what teachers do in helping students to learn consists of strengthening their metacognitive capacity, namely the capacity to monitor, evaluate, control and change how they think and learn. This is a critical feature of personalised learning.

Half the children thought learning was easy and half the children thought it was hard. About the same number of children realised that others help you learn. Most of the children when answering this question were aware that they learnt from their peers as well as adults. This is something that as practitioners we need to use more in the learning process. Generally from the children's answers it was clear that they did not acknowledge that they might change their learning behaviours in different situations.

Four children commented on what they knew about learning and understood that learning was connected to books. Each child then went on to connect learning to writing, rhymes, songs and play. It is noteworthy that only one child understood that while they were playing (child-led activity) they were learning. This was an interesting feature and highlighted that the connection between play and learning was not obvious to children. I think it is important that staff, parents and children are aware of and can confidently articulate to others the significance of this relationship. How this can be done will be discussed in the conclusion to this research.

One of the children thought that action (doing something) helped learning, whilst another appreciated that to learn something it needed to have been a recent experience. These two ideas gleaned from the children themselves confirm learning theory about how we best learn. Two children connected learning to a social activity by saying "Someone learns me and I learn them." There were four examples of children learning from each other in the child observations. Only one child attempted to respond to the question of why they want to learn by saying "Coz I want to know things."

A child's level and type of question can indicate how involved a child is in an activity and enable the adult to understand their thought processes. Young children can ask questions in a non-verbal way: they do this through their actions, facial expressions and body language. An experienced early years professional will be able to pick up these signals. In one of my observations I saw a child asking more interesting and probing questions through the small world play people than as themselves. Questions from a child and thoughtful answers from an adult can lead both to benefit from periods of sustained shared thinking. Siraj-Blatchford (2007, p. 12), citing Siraj-Blatchford and Manni (2008, p. 12), reports an example of this:

The teacher (Lisa) is scaffolding sustaining learning and thinking using open ended questions, a technique that was found to be associated with the most effective nurseries in the EPPE study.

Throughout the LDAs there were only a few examples of children using self-directed speech in their learning. There were many examples of children's play stopping or becoming restricted when an adult entered the play.

The last observation is of a planned LDA which involved den making. The adult intended to take the children out into the woodland den making area. This was usually a fun activity and one that the children really became involved in. It required the children to use their imaginations, to work together, to problem-solve and it gave them a great sense of satisfaction because there was not a right and wrong way to do it. They could be as good at this activity as the adult involved. However, this activity was completely overtaken by the children becoming absorbed in playing and exploring walking in the woodland stream. This was allowed and encouraged by the adult present with children spontaneously and independently dressing appropriately in their wellingtons for the activity. The children did not become involved in the predicted learning opportunities but this is not always a negative experience, as in this case. By pursuing their own interests, the children in fact met many of the learning objectives set out by the adult in the den making activity. Staff took the opportunity to share and discuss how this activity could develop children's learning in the future.

4:5 Conclusion

The ability to move children on within the learning process, to change practice and evaluate that change, provided an exciting and unique opportunity. This research used child observations to influence the environment, pedagogy and practice at the Early Years Centre. It gave children and adults the opportunity to enjoy a fruitful, fulfilling partnership. The results of this research have on times both confirmed and challenged my thoughts about young children's learning. It has confirmed my feeling that the type of learning young children are involved in inside and outside needs careful thought and planning. The two environments are able to offer children different experiences and, whilst they may react differently to these two environments, it does not necessarily mean their learning dispositions change significantly.

As researcher and manager of the Centre I was the only person who was aware of the staff assessments and the research assessments on the individual children. Staff had no idea of the research children's individual learning disposition data. They did, however, know the children's stage of learning well. Staff's assessments of the children's learning were consistent with the research data, affirming its validity. In Phase 3, the research explored how staff used this knowledge in planning and interacting with children during the learning process.

It was challenging to discover how little time we spend as a staff talking to the children about learning and how important it is for practitioners to have the time to reflect on what children are doing and saying. The research results have highlighted the complex issues that can ensue in developing an appropriate balance between adult-led and child-led activities. These and other areas are discussed in the next chapter. Issues of change and reflection are further discussed in the professional development portfolio (PDP) presented with the thesis.

Change has always been central to this research study and the process has helped me develop my own skills as a reflective practitioner and to understand more fully my role as a leader and manager of change. London (1988, p.11) studied the role of leaders and managers as change agents and reports that 'Change agents and Organizational Change Agents are leaders and managers who see a need for change, conceptualize and design the change, implement it, and/or adopt the change.' The action research and change element of this study encouraged

the development of activities that gave children the opportunity to develop new, and consolidate existing learning dispositions as well as encouraging staff to reflect on their practice, make changes and become part of the action research cycle.

The LDA cycle involved devising new ways of thinking about and evaluating activities from the perspective of both adult and child. It involved connecting theory and practice as well as adult-led and child-led activities. It provided a common framework from which to evaluate the learning content of adult-led and child-led activities, both inside and outside. This theory together with the CLDO data indicated that the LDAs needed to be in small groups or pairs, enabling adult and child to maximise interaction and learning opportunities. These ideas and others will be reflected upon in the next chapter when I discuss my findings.

CHAPTER 5 Discussion of Results

5:1 Introduction

One of the most important strands in all the learning interactions I observed during this research, whatever the situation, was that between the adult/child and child/child. In practice, it was not always possible to have a clear divide between adult-led and child-led and inside and outside activities. Some activities started outside and moved inside or vice versa. Other activities started as adult-led and became child-led, or vice versa. There were some children in the study who constantly needed adult attention or reassurance and there were examples of how this interfered with their development socially and cognitively. Their interaction with peers was less competent and they often missed out on experiences that would have challenged personal competences. In particular during my observations there was one child who was not able to join in with the independent imaginary play in the garden because he was constantly at the side of an adult.

The Child Learning Disposition Observations (CLDOs) confirmed for me the need for children to be settled into a setting before they can begin to learn. It was also apparent that settling children requires them to have the opportunity to complete routine activities. Featherstone (2012) believes that, when doing this, children are strengthening the myelin connections in the brain, connections crucial to their future development and learning. These should include enabling them to explore materials, without the need for an outcome, to be able to repeat processes and actions over and over again. Children, inside or outside, do not always require a challenge to learn. They should be given the opportunity to experiment and think with the known and practised.

In the introductory chapter for this research I discussed the important features of young children's learning dispositions, early years pedagogy and the voice of the child. These, together with the desire for improvement based on research, have involved me, the staff and the children on a reflective journey. As a researcher, I have been personally involved in this research throughout: I have not entered a setting, gathered data and then left. This is the nature of completing a professional doctorate. I remain at the setting and personally and professionally will continue to manage the changes brought about as a result of the research. The professional and the personal are interwoven in this research.

5:2 Research Milestones

I have chosen three significant milestones that I believe were important benchmarks that contributed to the professional change integral to this research. These were the quality of the professional discussions about learning that took place as a result of this research, the contribution that this research has made to ‘children’s voice’ at the Centre, and the consideration given to the learning environment. The changes I have selected for discussion in detail are approximately in chronological order. They are connected, as each one builds on the foundation laid by the previous one. The figure below illustrates the three milestones that have improved the quality of the reflective and change cycle that has been established at the Centre as a result of this research.

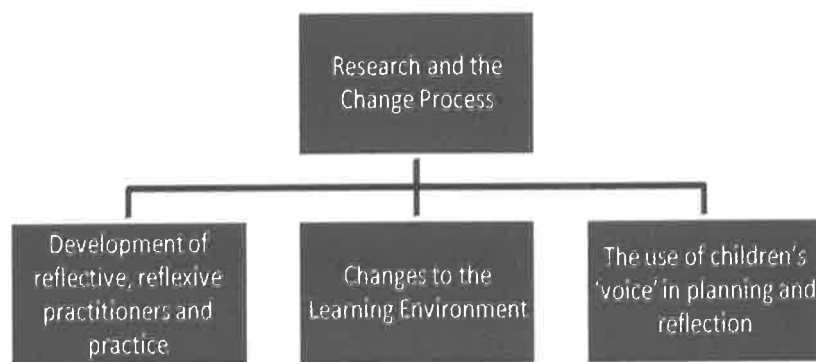


Figure 7: The Milestones that Supported the Research and Change Process

There were a number of stages during this research when I felt that I had taken a significant step forward in my understanding of how children learn and of how this might impact on the pedagogy at the Centre. Sometimes these advances included a change to my own thought processes. Other changes were less complex but were nonetheless significant, and still led to palpable changes to practice.

The first significant professional discussion resulted from a number of small modifications and changes made to the professional dialogue that took place between staff at the Centre. Each discussion resulting from the Learning Disposition Activity (LDAs) cycle deepened thought, understanding and practice about young children’s learning. In one of these conversations a member of staff commented that “Child X was methodical in approach to activity very social, uses language to explain and explore a process; Good perseverance.” This seemed to me to be reminiscent, from my reading and understanding, of the

conversations that might happen between early years professionals in the Reggio Emilia schools of Italy. Edwards *et al.*, (1998, p.240) cite Forman and Fyfe who explain what education is to the professionals in the schools of Reggio,

The education of children now lies in helping them study their ways of making meaning, their negotiations with each other in a context of symbolization (Gardner, 1983), communication (Tharp & Gallimore, 1988) narrative, and metaphor (Bruner, 1990).

This was how staff discussions began to focus on children's learning, describing what was actually happening when a child was taking part in an adult-led, child-led activity or playing. We were thinking about and discussing the process of learning rather than the outcome: we had given meaning to what was happening.

Staff at the Centre regularly reviewed and evaluated practice. These reviews focused on how well an activity had involved the children, whether the outcomes had been achieved, whether resources had been appropriate and any changes that may need to be made. Sometimes we assessed whether a child had or had not achieved a pre-determined level of attainment. Plans were made for their next steps. We discussed how the activity might have been changed to include children with a variety of abilities, from the more able or gifted child to the basic skills child or a child with additional needs.

At the early stages all discussions were relevant and included evaluations about whether children had become engaged and were successful at an activity. They were not focused on the process of learning, however; how we might be able to help them acquire learning skills as part of the process. We did not discuss how the child was learning, or what we expected them to be thinking about and exploring. We thought about what had happened during the activity but not about the opportunities for learning that had been missed. We did not consider how we might have used the opportunities presented to talk to the children about their learning, to help them understand how they learnt. Staff almost never shared with the children how they learnt, what they would do when faced with a problem, how they remembered things and retrieved them. We did not share with them the joys and satisfactions we ourselves experienced from learning.

Rarely did we focus on the learning that was evident in the child-led activities and how an adult might be able to facilitate and help children get the most out of their play. We did not

record, discuss or review any examples of this practice during our evaluations. We did not give this work the status or the time that it deserved. However, this research has given me the means to do this and the vehicle to encourage staff to reflect and focus on our practice. The LDAs gave us an objective way to talk, not only about learning but about our part in that process. We were able to use our observations to reflect on learning when children are leading their own learning and how we interact with them in these situations. It has helped us take our own learning further and to become more focused and reflective practitioners. We now have the vocabulary to reflect on a complicated but familiar process, something that we as early years professionals are involved in every day.

The next significant step was the first time we discussed and involved the children in our reflections. This resulted from an activity that involved the children in learning about the Chinese art of origami. We had planned to talk to the children about origami and then show them some examples of the art. We then wanted them to make an origami model themselves. This activity was considered to meet the learning criteria set out in the LDA. However, the practice was very different to this. Although the children appeared interested in hearing about origami, the activity itself was too difficult for them. On reflection we realised that we had asked them to do something we could not have done ourselves. The learning in this activity involved problem-solving and fine motor skills that were beyond their level of development. There was no intrinsic motivation hence the children were not interested in the activity.

The following day we decided to share these thoughts with the children involved, explaining not only our reflections on the activity of the previous day but how and why we had come to these conclusions. We then asked the children what they had thought about the activity and what we had shared with them. They said “too hard, couldn’t make picture” and we agreed. We asked them would they like to try again if we changed things. We then talked about how we might be able to change things. One child said “we can fold things,” another talked about the type of paper she had chosen – pink with hearts on it. The next step was to ensure that the children’s and our reflections made changes to our practice. We agreed to concentrate and explore how to fold paper because this was important in origami and to explore the properties of the different papers used.

We tried the activity again; this time it was far more successful. We discussed what we needed to do to fold paper successfully, what sorts of things we could make, and the children were able to choose more effectively what type of paper to use. The child who had talked about the pink paper with butterflies chose this paper again. Now they could and did help one another with the folding and the adult shared in this process. The second activity gave us the opportunity to talk to the children about learning from your mistakes. We were now including children not only in planning but in the reflection on and change of that planning. This was a learning process that they could possibly assimilate and use to facilitate their own learning in the future.

The final stepping stone was a surprise to me but one that I was extremely pleased to see and knew was important to my research. I was unable to attend a staff meeting in February 2011 when staff were going to discuss the planning and wall displays for the second half of the academic year. It was decided in my absence, at this meeting, to have a display in one of the classrooms on learning using the heading 'How Do We Learn'. This was the first time that we had had a display explicitly on learning at the Centre, children's learning and well-being is at the heart of everything we do. Yet, until this moment we had not given the learning process the priority we should have done. I believed that this display and the work leading up illustrated how the staff were prepared to support my research and understood why it was important and that there was a need for us to make changes to our practice.

Children at the Centre have always been involved in thinking about what should go on the wall displays, how this should be done, and how the end display will look. This display would be no different and the teacher began to discuss the display with the children. The process of making decisions about a display would be familiar but the ideas and content we were looking for was very challenging. We began by telling the children what the aim of the display was and then asking them what sorts of things could we include on the display. As expected, they found it difficult to verbalise how they learn. The teacher approached the topic in various ways but none of these were successful. One of the children did suggest that photographs help you learn. This confirmed that children may have attended our setting for four years but they knew and could articulate little about the concept of learning. This conclusion was important to the research because it confirmed the need for us to help children understand the process of learning better.

There has been recent research confirming that the younger children understand their learning the better learners they will become. Whitebread et al., (2010, p.163) write,

The consequences of young children developing early metacognitive and self-regulatory abilities have been shown to be profound. Blair and Razza's (2007) study of 3 to 5 year old children from low-income homes in the USA, for example, showed that aspects of self-regulation accounted for unique variance, independent of general intelligence, in early mathematics and reading approximately a year later.

The teacher then asked the adults in the room what they would put on the display. Three suggestions were given: one about doing things over and over again, a second about singing to remember things and a third about writing things down. We decided to start the display with these suggestions and to take photographs of the children when they were using any of these methods to learn. A photograph of the final display can be seen in Appendix 12: this includes illustrated examples of the children's learning and thinking.

5:3 Young Children's Learning, Pedagogy and the Voice of the Child

This research has involved the study of young children's learning and how this learning is supported by early years practitioners. Bredekamp and Copple (1997, pp.8-9), as cited in Edwards *et al.*, (1998, p.68) remark,

Understanding that children are active constructors of knowledge and that development and learning are the result of interactive processes, early childhood teachers recognize that children's play is highly supportive context for these developing processes.

This research study has looked at the process of learning and made suggestions as to how to improve this process for children. It has made it clear to me that it is the 'how' (the process of learning) that is the vital question to answer if learning is to be improved. Reid (2005, p.4) suggests that 'it is crucial, however, to consider the process of learning as well as the product, and to give serious consideration to how children learn, and specifically, how they can learn more effectively.' The focus on the learning process *during* an activity, as opposed to the *completion* of the activity, was an important change to the success of the research.

Furthermore, the development and the use of vocabulary to describe learning was an important first step in thinking about how young children learn. The thought and discussion involved in this process helped all involved in the research to improve their understanding of learning dispositions.

Once the descriptors were in place and approximate hierarchical categories emerged, it was possible to begin to think about ways forward for the learning of the children involved. The results of the research have enabled me to classify the learning skills the children have used in my observations into two basic categories: memory skills and cognitive skills. Memory skills were easier to define and therefore staff were more able to help young children develop them. Cognitive skills were more complex and required staff to grapple with the thought processes of young children who are not yet able to verbalise their thoughts about learning.

The staff in the research setting know the children's learning dispositions well and can describe their learning in detail, but this information was not necessarily considered when planning an activity or interacting with a child. There were no examples of staff describing learning for the children or reporting the process to them as they carried out activities. Staff did not take opportunities to remind children of how they might retain important information. This dialogue and vocabulary about learning was missing amongst staff and in staff interaction with the children.

The learning disposition categories, characteristics and descriptions used in the research were shaped by the staff at the Centre and the knowledge gained from the review of the literature; it particularly influenced the criteria connected to language and communication. The connection between thought, language and learning is well established and there are many theories as to how we learn language and how language helps us learn. Whitebread *et al.*, (2007) discuss examples of how we often repeat words or phrases internally or externally in order to learn them. The work of Laevers (1994) is discussed in the Literature Review and this particularly informed our understanding and learning descriptors for concentration and engagement. The research literature explored the importance of self-motivation and intrinsic reward to learning. It gives children responsibility for their own learning.

The children during this research were categorised according to the learning dispositions: Novice Learner, Capable Learner and Practised Learner. The following is a practical illustration of how these categories looked when observing the children taking part in one activity. This activity was an adult-led activity that involved making patterns with tissue using colour and shape. The Novice Learner was not able to engage with this activity, quickly becoming distracted and wanting to move on, but did sometimes socially interact with the adult. The Capable Learner was able to engage socially with the adult and could

answer directed questions appropriately, concentrated on the activity until it was complete and was proud of the result. The Practised Learner used language to talk about what she was doing and stayed with the activity even when the adult left the area to attend to something else. The Practised Learner was engaged in the activity for over 85 percent of the time.

Karlsdottir and Gardarsdottir (2010) suggest that, in a pre-school setting where children's learning dispositions are valued, children construct a new identity by: taking an interest, being involved, persisting with difficulties and uncertainty, communicating with others, and taking responsibility. This describes for me the point at which the theory in this research interconnects with practice. It requires adults to be responsive to children and, in the context of this research, to consider the input and implications of practice for the research.

A further area of research investigation was how the environment might affect learning dispositions and what early years practitioners might do to support learning. The answer to these questions was positive. Again, however, this does not appear to be in a consistent way. The research indicated that there was a difference in the degree of change between adult-led and child-led activities and inside and outside. This required us to question further practice at the Centre as we tried to accommodate these differences and enable children to make the most of all the different learning opportunities presented to them.

The research has been particularly relevant to Wales because of the introduction of the Foundation Phase which emphasises the importance of children's learning outside, and this has very often resulted in settings planning for the same learning in both environments. What is important is that the outside gives children the opportunity to learn through different mediums and enjoy the physical freedom so much needed by this age group. I have learnt from observing children in both environments that children need, and will pursue, the experiences that only the outside can allow. Early years professionals need to focus on and consider whether the learning opportunities inside and outside give children the variety and the most appropriate learning experiences they need.

The results of my research do not indicate a significant change in children's learning dispositions whether they are inside or outside. The Foundation Phase has based some of its policy on studying the research of the learning environments of the Scandinavian countries where children spend much of their time in the early years playing and learning in a

stimulating outdoor environment. It was my experience from visiting schools near Gothenburg in Sweden that children do not repeat the same learning activities inside, outside. For example, they would not expect a child to complete a literacy activity that involved sitting down and writing, but provide the children with physical learning activities that need the outdoors to be experienced. The Welsh Assembly Government in the Outdoor Learning Handbook (2009b, p.2) says this about the outside environment:

The outdoors is the ideal environment for experiential learning, because it offers unique opportunities to be creative, to move around, to be noisy and to take risks. The outdoors is full of special stimuli such as weather, sounds, smells and textures which can enrich and enhance a child's learning environment.

Children have experiences that allow them to enjoy the freedom and expression that only the outside can give. It is the quality of the outside environment, the learning opportunities and the adult-child relationship that seem to be the most significant to children's motivation and engagement in learning.

The data analysis of the CLDOs has helped me understand that children's learning dispositions and characteristics did not change significantly between the inside and outside. They were more influenced by the activity undertaken and by the interactions of peers and adults. The data shows there was more fluidity between the Capable Learner and Practised Learner than between these and the Novice Learner. Many of the children showed the Capable Learner and Practised Learner characteristics in one activity. Very often, whether a child performed at the Capable Learner or Practised Learner level depended on the environment circumstances and not necessarily on their learning dispositions.

Completing the CLDOs involved staff in observing children's learning and further training in this skill. This process gave staff the opportunity to learn more about observing how children learn. The Child Learning Disposition Observation Tool (CLDOT) gave them the vocabulary to further describe and discuss the learning dispositions of young children. Staff commented on the usefulness of the descriptions because they gave them the opportunity to focus and comment on learning. They offered staff a narrative about learning and opened up the opportunity for them to discover more about their part in this process.

The purpose of the (LDAs) was firstly to analyse a child's learning disposition, tracking their development whilst being involved in the learning process. Secondly, the LDAs created a

framework to evaluate whether predicted and actual learning corresponded. Thirdly, it raised awareness amongst staff about what affects children's learning and how they might improve that learning. The LDAs ensured that the focus of any activity was on the process of the children's learning, not exclusively on the outcomes.

The research required me to define and reflect on what exactly is meant by the terms adult-led or a child-led activity. The research observations themselves led to the following examples. An instance of an adult-led activity inside was when the children were learning about the work of Gaudi (1852 – 1926) and making models in his style. An adult-led outside activity involved the children in making an observational painting of what they could see in the Centre garden. A child-led activity was one where the adult followed the child's lead and might or might not have a learning outcome in mind. If there is no pre-conceived learning outcome, and the adult follows the children's lead, then the activity remains child-led. The Literature Review details the recent work of Bae (2010) who often expounds the connection between play and children's voice and the considerable influence of the WAG Foundation Phase documentation in Wales on pedagogy. Some of the CLDOs have been of children where no adult has been in or near the learning environment.

The CLDOs and LDAs have instigated change at the Centre. Some of these changes have already been established, whilst others require more preparation and thought. Table 16 shows the environmental changes resulting from this research.

Table 16: Environmental Changes Resulting from the Research

Short Term: Changes already established as a result of research.	Long Term: Changes that required more time to become established.
Staff in future would articulate for carers and children the significant relationship between play and learning whenever the opportunity arose. This would be done through informal and formal discussion and in displays.	There was a need for staff to increase and improve our understanding of learning, so that the quality of our professional discussion could improve further.
Staff began to complete the child observation sheets when children started attending the Centre and this would be done again later at a set date providing evidence for progress.	The powerful relationship between learning and play needed to be explored more by staff and how it could be incorporated further into the practice at the Centre. To improve children's 'voice' in their learning.

	Staff need to think more about where an activity should best take place, especially inside or out, and to give more thought as to how they should facilitate learning, whether it is a child or adult-led activity.
	To introduce a quiet thinking area in each classroom and to incorporate time for reflection. To give this activity a formal place in the day but to be part of informal practice.

These changes to the learning environment and to how adults perceive their role within that environment seem to have an influence on children's learning. They required further change to the culture and ethos within the Centre and this can only happen over time and with staff's increasing experience of this type of work. The catalyst for this change was the LDAs. During the LDA cycle I began to explore how much our children knew and could reflect on their own learning. This aspect of my study focused on the work of Whitebread *et al.*, (2005 and 2007). Later I investigated and drew on the work of Carr (2011) and her Learning Wisdom Project set in nine Childhood Centres in New Zealand to help me understand more about what the children in my Centre knew about their learning.

It is my intention that, at the Centre in the future, we give more consideration to the learning opportunities offered in the two environments of inside and outside using the unique qualities of each to give children optimum learning opportunities. It seems to me a missed opportunity for children to be encouraged to use the outside more only to be expected to experience activities that they could have undertaken inside. The outside enables them to learn in new and different ways and it is this that may give some children the opportunity to enjoy the positive learning experiences they may have not had when learning inside. My CLDOs have shown me that children may use the same learning skills inside and outside. However, the two different environments give them the opportunity to transfer and adapt their skills to diverse situations. They also have the opportunity to develop and stimulate their learning skills in a way that would not be possible inside and vice versa.

When they are outside, children challenge themselves physically; they need to be running around, often interacting with their peers at the same time. I observed many examples of

children releasing emotions while physically active, even when the play had no obvious learning outcome. An example of this was when it was noted by an observer that children just “ran around outside.” There was a good example of a child whose learning at first was entirely centred on adult company, later learning to share and learn with his peers through playing and running around outside. Children outside do not want to be physically inert; therefore any planned learning activity needs to take this into account. There were examples in the observations of children who became more alert and active when outside but this did not appear to impact on their learning characteristics or dispositions as defined for this research.

In my CLDOs I often found that an adult-led activity could become a child-led activity and vice versa. A balance is needed between adult-led and child-led activities because each gives children the opportunity for specific experiences but not exclusive ones. When activities are planned and directed by an adult, what is planned for does not always concur with what actually happens. Children very often naturally follow their own agenda and it was difficult for adults to intervene. Whitehead (2010) tells us about an incident that exemplifies this type of behaviour.

This kind of subversion of authority and power is risky – hence the whispers at the back of the group – but it is apparently worth the risk as it clawed back an element of power and control in a teacher dominated session.

Whitehead (2010, 7:11)

I observed this when a group of three children had been given input on Gaudi and his work and then asked to make a model in Gaudi’s style. The children, when left to complete the task, followed their own agendas. There were occasions when the adult present brought them back on task but this was short-lived.

Children were often observed at play in the imaginary areas both inside and outside or role playing with their friends. Their favourite role play outside was often some sort of chasing game for both girls and boys, inside the girls liked to play house and the boys liked to play at being animals or firemen. This type of play gives children autonomy over their interactions and choice. In the early years children’s voice is embodied in play. Stamatoglou (2004), having studied children at play, said that ‘These learning stories have shown young children as competent both personally and socially in imaginary situations; situations where feelings were explored and negotiation skills were being developed.’ Learning through play gives

children control of how they spend their time, what and how they learn and who they interact with (both adult and peer). The sensitive adult can help children learn and progress through their play. This research has begun to explore the learning relationship in and between adult-led and child-led activities. I learnt from my child observations that children do not always want to be stimulated and challenged. Sometimes they require activities that allow them to rest, think and 'daydream'. If adults do not allow children to do this then they will, if at all possible, concoct this situation themselves.

The LDA involved children in the reflection and review process, something that has not been done, in this way, at the Centre before. The LDA cycle has begun to include children in evaluating activities and discussing how they could be changed. It has enabled adults to discuss with children the possible learning opportunities that could have been pursued during an activity. It has started to give them the opportunity to revisit activities and pursue these learning opportunities. It has been a revelation to realise that these young children can participate and own their learning at this level.

Staff have been encouraged to talk about their own learning experiences, with the children helping the children to learn about learning. This discussion can then be used to gain insights into the learning of both children and staff. This improves children's understanding of their own learning and reinforces for them the fact that their ideas and thoughts are valued by all the practitioners at the Centre. It has been a common theme that has crossed the traditional boundary that can exist between the education and care of young children. This is very important because the complexity of young children's learning undoubtedly crosses this same boundary. The notion of including children in reflecting on activities with staff is at the earliest stages of development: it is yet to be embodied in the policies and practices at the Centre. It is, however, my intention to pursue this and eventually to have it incorporated into the teaching and learning throughout all the settings within the Centre.

The research has taken children's voice a step further by giving children not only the opportunity to be heard but the experience of understanding and realising that their voice should be heard, as well as understanding that, within a reflective process, other voices are also heard and they need to experience what it is like to share and begin to consider the opinions of others. Children should not only have things done for and to them but they should experience what it is like to do things for their peers and the adults around them.

They need to understand that with power comes responsibility and this research has taught me that they are capable of responding positively to this paradox.

5:4 Reflections on Research and the Change Process

It was essential to the success of this study that the research not only influenced my own practice but that I became a catalyst for changing pedagogy at the Centre; the research organisation. Burnes (1988) has attempted to describe an organisation that is ready for this type of change. The criterion he thought relevant for a 'change organisation' was one that works closely with its customers, measuring and deriving its productivity through its people. Progress in the company is value-based. It demonstrates autonomy as well as entrepreneurship. The organisation's communication is informal but intensive, supported both physically and materially. It has a simple form, lean staff and simultaneously has loose-tight properties. One of the most important features he mentioned was that it 'sticks to the knitting' – meaning that the organisation focuses on its core aims. I believe that the Centre is such an organisation and will continue in this way to the benefit of the children attending. In my role as manager of the Centre, I and my staff constantly have to review practice and assess children's progress as part of a continuous self-evaluation process. Any change resulting from my research will be evidenced, in the long term, through this process.

Discussions with and dissemination of my early research findings to staff at the Centre helped to indicate and confirm the way forward for change and improvement. This thread is integral to the research and directly links theory to practice. The process required an understanding of change within the workplace and how this can be managed. The final stages of the LDA cycle and corresponding results were very much linked to the theories and research on change and the management of change in the workplace. This is summarised in the literature through the work of Rowling (2003), who suggests that a traditional pattern explaining the process for change would be to analyse, think and change. He then proceeded to expound on this theory further by suggesting that this pattern would benefit from an overlay of sense, feel and change. This seems to sum up the process that has been undertaken and is continuing at the Centre.

The LDA cycle is a reflective process. My practice during the research has taught me that it is a process that needs to be completed on a one-to-one basis with staff. Further, the

procedure needs to be adjusted depending on the particular experience, training and knowledge of those involved. It is my privilege to work with staff with a multiplicity of personal and professional backgrounds. The work culture at the Centre values this diversity and the varied experiences that all early years professional can bring to enrich the learning of the children.

LDAs involve staff in thinking deeply about the activities we plan for children. They encourage thoughtful discussions about individual children's learning dispositions before planning an activity. They have involved observing and comparing possible learning opportunities to actual learning. This becomes a cyclical process and is described in more detail in the Literature Review, particularly the work of Vanderlink and van Braak (2010) and the cycle of research-practice-research.

The professional dialogue that took place as part of this research, between staff at the Early Years Centre, became the catalyst for the development of high-quality reflection and action at the Centre. It involved staff looking back on activities and the interaction within activities with a view to improving learning opportunities. The dialogue that began when this research started and continued throughout the research phase progressively became more discerning and perceptive. The professional dialogue became informally part of the CLDOs and then later, formally part of the LDA cycle.

We have begun to explore how our reflection influences children and their learning opportunities. It has allowed staff from all settings to regularly and formally discuss the children's learning. This has encouraged critical objective reflection. This process has made me acutely aware of the limited professional reflection and discussion that was prevalent at the Centre before this research was undertaken. These changes have resulted largely from the CLDOs and the LDAs.

The reflections of the practitioner involved in the LDAs and my own reflections involved critical analysis of teaching and learning and an acceptance that improvements needed to be made to pedagogy. This process was sometimes made even more difficult by the fact that practice was already good at the Centre as evidenced in many external reports (See Appendix 13 Extract from Estyn Report 2008). However, the following areas of practice both positive and negative were highlighted by our own observations and reflections:

Positive:

- The practitioners knew the children and their development stages in detail and could articulate each child's stage and disposition towards learning.
- There were some but not many examples of adults intervening positively in child-led activities.
- There were children who understood and could articulate several important elements in the learning process.

Negative:

- The children's interests were rarely the stimulus for planned or unplanned activities.
- Adults' prediction of the opportunities present in an activity did not always match the opportunities taken by a child in practice.
- Staff rarely discussed, showed or modelled to children how to use various learning techniques.
- Staff did not articulate or discuss the learning process with the children.

This information led me to conduct an audit of staff in the form of a questionnaire towards the end of the third phase of the research. This questionnaire asked staff about their own learning and whether they shared their own learning experiences with the children. It set a benchmark from which I was able to quantify and assess some of the changes in attitude and practice resulting from the LDAs. The results of this questionnaire are in Table 17. It also helped to provide the basis for discussion with staff about how we could use the questionnaire data to improve the focus of our interactions with children when involved in an activity. Talking to children about learning became an obvious way forward; more difficult was deciding how this would be done with very young children.

This table shows that staff generally believed they are good learners. It was significant that staff did not talk to children about how they learn, about learning itself or about the skills children use to help them learn. However, staff had a sound knowledge of children's learning and they were able to recognise and describe the skills children used to learn. The analysis of this questionnaire resulted in the inclusion of a narrative at the start of an LDA explaining some of the learning techniques and reminding staff to discuss learning in general before

starting an activity. Interestingly, many staff want quiet and time to learn a new skill or piece of knowledge. How often are children able to experience these advantages in an early years setting?

Table 17: Results of Staff Learning Questionnaire

Number of staff returning questionnaire	14
How many staff consider themselves to be good learners /not	11/3
How many staff like learning with others/on own/both	4/1/9
How many think learning is easy/hard/both	2/6/6
How many like peace/time/quiet to learn	13/8/7
How many like to ask questions immediately/later	9/13
Following questions answered by never/rarely/sometimes/often	
How many have learnt by making mistakes	0/0/4/10
Have you surprised yourself by doing something you didn't think you could	0/0/5/9
How many have learnt by explaining their learning to someone else	0/0/6/9
How many have learnt by thinking and talking things through in their head	0/0/6/8
How many have learnt by playing around with ideas	0/3/8/3
How many have talked to children about the ideas above	1/5/6/2
How many have seen children use any of the above	0/3/7/4
How many have used the following strategies to help them remember	
Repeating aloud	13
Remembering by association	10
Using initial sounds	4
Counting	5
Mark making	13
Pictures	4
Mind maps	1
Making bags of significant items	1
Rhyming	1
Picturing context of learning	1
Have you talked to the children about these strategies never/rarely/sometimes/often	2/3/6/3

We discussed the results of the staff questionnaires in detail and whether we should give our children the opportunity to learn in an environment conducive to some of the circumstances described in the questionnaire. This would require the re-organisation of settings such as ensuring that children have a quiet space where they can think away from the hustle and

bustle of a busy early years setting. This would be discussed at individual setting staff meetings. These changes did not require the individual shift in mindset that results from the longer-term changes that are a part of the LDA cycle. These activities need to be completed individually because, as Peters and Davis (2011, p.15) suggest, 'It appears that 'stretch' in children's thinking can be developed through subtle changes in the interactions that occur in the everyday moments.' This type of shift in pedagogy requires a personal response and commitment. I fed back to staff the results of this questionnaire on 11th June 2011. We discussed these and established a way forward.

Staff were asked to complete evaluations of this session. Some of the comments included the realisation that an individual needed to talk to children more about their learning. An example of this is "Talk to the children more about how I learn best and to also make sure that they are aware that everyone learns new things every day." Many commented on how they were beginning to understand how they learnt, "I learnt that I learn more when I make a tune or a funny saying about it to remember." Comments included how staff's learning might affect how they understood the children's learning: "Better understanding of how I've learnt and made me reflect upon how this may affect my interaction with the children." Many commented on the need to discuss with children different learning skills, techniques and approaches. For instance, one person commented "Being willing to share and talk to children about how I and they learn."

One of the final stages in my research was to interview the member of staff who had been most involved in the LDAs. The questions and answers are in Appendix 14. I was very pleased with the results of this interview, which show how much this member of staff had learnt about the research. I was impressed by her open and honest answers. Most of all I was thrilled with the way that the research had encouraged her to question practice, even though this member of staff is considered to be one of our best practitioners. She said "I have learnt to think more deeply about what we are providing for the children. We may think they are going down one path and they may chose a different path altogether."

Staff are thinking about learning more, their own learning and that of the children. One member of staff commented "I have not learnt anything about my own learning because I know what helps me learn. But it has made me aware of how others learn and that this might be different to the way that I learn, and as a teacher I should not impose my way of learning

on the children because it may not suit everyone.” Finally a short but significant observation that the research has “opened my eyes made me look at how children learn in different ways.” I believe this interview confirmed that we were ready to move on and enter another stage in our developmental cycle.

5:5 Conclusion

At the beginning of my study, I thought my research would fall into the second of Fullan’s (1991) components. Now at the end of the research, I believe it falls under all three of Fullan’s components. The learning typology and CLDOT are new materials, the LDAs encouraged new teaching approaches which, in turn, initiated new beliefs and challenged pedagogical assumptions. It is this last component that will provide the catalyst for a continuously improving and changing culture at the Centre.

The learning dispositions described and authenticated in this research have a connection to learning style theory. The idea of young children’s learning dispositions influencing teaching and learning is mentioned by the Welsh Assembly Government and discussed previously in Chapter 2, the Literature Review. The role of the adult in children’s learning is also discussed in the literature, particularly the work of Walsh (2010) and of Siraj Blatchford and Sylva (2004) on the most effective balance between child-led and adult-led activities. This, I felt, was directly related to recent research about play that questions whether in fact play can exist at all with adult intervention or whether it is something that only children can invent and sustain. Play Wales (2006) proposes that ‘Most children will play without the need for adult intervention, even in the most barren of environments, but an environment rich in possibilities supports their play best of all.’ The National Playing Fields Association, Playlink and the Children’s Play Council (2000, p. 8) in their document ‘Best Play’ explain that:

The child's control of their own play activity is a crucial factor in enriching their experience and enhancing their learning and development. Adults need to recognise that play is something children do very well on their own.

Both these suppositions originate from a play background and not from educational theory. Research in the latter field emphasises the positive impact for learning from adult intervention in play, as discussed in the literature review and mentioned in one of the individual staff interviews, at the Centre.

The Foundation Phase implemented by the Welsh Assembly Government (2007) and based on current relevant early years research emphasises learning outside. In my observations, whether inside or outside, I saw children change a task so that they could enjoy and explore the materials or the action within the activity itself. One of my observations of Child 3E showed her supposedly completing an observational painting outside. What she was actually doing was playing and exploring the effects of mixing and using the water paints. This made the outcome of the activity secondary to the aims of the activity and the adult. I believe a well-balanced early years curriculum should include both challenging and repetitive activities.

Throughout my research observations I was amazed at the willingness of this age group to cooperate with both adults and peers. There were many instances when children were required to leave their play to participate in an adult-led activity and this they did willingly. Some then returned to their original play, others did not. There were many examples in the study of children being kind and generous to other children. One such activity was when a child in the research group was enjoying wading in the stream over the woodland. One of the younger children wanted to join in but could not get their wellingtons. The older child wading was prepared to leave the stream to help the younger child get their wellingtons.

The Centre is in a socially and economically challenging area. The parents of the children attending the Centre do not always have the skills to provide appropriate support to enable children to achieve all of which they are capable. It is therefore more important than ever that the Centre meets the needs of both children and parents. It is part of the role of the Centre to facilitate children and parents in finding the confidence to have their voices heard. This is done by listening to both parties and including children and parents in decision-making. This culture has been established over time at the Centre. The results of this research will be reported to parents and their views will be sought. This should help parents become aware of the capabilities and potential of their children. In the final chapter of this study I will discuss how I intend to take my research forward, not only to staff and parents at the Centre, but to a wider audience. I will reflect and present any thoughts I have on how the research could have been improved or done differently.

CHAPTER 6 Evaluation of Research

6:1 Introduction

This was not a research study set up in a laboratory that could be repeated if things went wrong. It involved real children and staff in a fully functional working environment. Any proposed changes had to be well thought-out, constructed and based on evidence. Fullan (1991) proposes that change in education can have three possible components:

The possible use of new or revised materials (direct instructional resources) such as curriculum materials or technologies. The possible use of new teaching approaches (i.e. new teaching strategies or activities), and the possible alteration of beliefs (e.g. pedagogical assumption and theories underlying particular policies or progress).

Fullan (1991, p.37)

It was a little unnerving to realise that only once I had completed the three phases of the action research project did I really understand the complexity of my research questions. It is therefore with reflection and more understanding that I ask these questions at the end of my research than I did at the beginning.

RQ1 Can we identify, observe and understand learning dispositions in children aged two to four years?

RQ2 Do young children change their learning dispositions with age or adapt them to different learning environments?

RQ3 How is it possible to adapt pedagogy to influence a child's learning potential through understanding their acquisition and use of learning dispositions?

As my research progressed, RQ1 and RQ3 became more important than RQ2 in developing a new and improved pedagogy at the Centre. RQ2 became in some ways periphery, because whether children adapt or change their learning dispositions did not matter as much as how pedagogy could be influenced by quality reflection and the opinion of children themselves about their learning. These two priorities are relevant whether the learning is taking place inside or outside the classroom.

6:1 Review of Research

The Child Learning Disposition Observations (CLDOs) in this research study focused on child-led and adult-led activities, and they provide evidence that there are both positive and negative features to adult-led and child-led activities. It is the responsibility of early years

professionals to emphasise the positive and counteract the negatives in both. During my child observations I learnt that the adult can often enhance or destroy the learning potential of an activity through their interactions with the children. This requires sensitive management from the adult adapting their approach and teaching style to meet the needs of a child at a particular time. This means the early years professional must have a thorough understanding of early years theory and strive to understand how best early years children learn.

It has been vital to the success of the Centre that staff, whatever their professional backgrounds, work effectively as a team to improve our policy and practice. However, these differences can sometimes be overlooked when focusing on reflective practice. It is my experience that this is sometimes more a part of the culture for some professionals and not for others. Generally, I found that reflection is embedded in the school setting because staff there had been involved in the reflective process for longer. They accepted change, monitoring and evaluation as routine.

I felt that staff who were not so familiar with the reflective process would require me to take more time in introducing the Learning Disposition Activities (LDAs) cycle into their settings. I explained and supported staff through this by giving them more time to become familiar with the child observations. I ensured that they were comfortable with completing these observations themselves before moving on to the LDAs. I encouraged the staff to talk about the research in ways and in stages that they felt comfortable with. I tried to ensure that there was no pressure in the process. My experience has been that even though these different starting places into reflective practice existed, all staff at the Centre have confidently contributed during the feedback and reflective sessions undertaken during the research.

My research methods have taught me that improvement to practice and pedagogy comes from working with practitioners; as in the development of the learning typology (CLDOs) and (LDAs). These processes have meant that the change comes from inside the reflective practice of the practitioners themselves. They understand the need for the changes; they are not imposed from the outside. On reflection I would like to have spent more time on the LDAs and perhaps could have introduced these earlier in my study, since it was from these activities that the action research cycle was completed and the change aspect identified and implemented.

Generally I am pleased with the outcomes of my research study, particularly drawing on the work of Edgington (2005) and being able to say that I believe the term ‘dialogue’ now aptly describes the nature of the reflective conversations between staff at the Centre. This improvement to the quality of the professional dialogue was one of the most important outcomes derived from this research. Dialogue has improved because reflection by the practitioners now includes the use of a shared observational tool. This helps to make the reflection deeper and more rigorous.

However, the results have meant that there is more work to be done at the Centre on ensuring that changes to pedagogy are applied consistently across all settings. The idea of placing children’s voice at the heart of learning means that practitioners lose some of their control over the curriculum. The expectation is often that children learn in, possibly, prescribed ways, often at the convenience of the adult or the routine and rules of a setting. This research study proposes that children have more control over how they learn, over the curriculum and over the learning environment. This can be problematic for practitioners at times and difficult to come to terms with. It is also new to me as a practitioner, and therefore I cannot speak (as was often the case in the past) from experience to help staff in this process. It will be my responsibility to share this work with other professionals who visit the Centre and convince them that the changes we have made as a result of the research will improve the educational standards of the children attending the Centre. The evidence for this will only become available in the long term.

6:2 Research Contribution and the Way Forward

The original motivation for this research was to improve the pedagogy and children’s learning at the Early Years Centre where I am the Manager. The research has achieved this aim and more; it has established a way forward (in the future) for further improvement. I began the research as an individual, but as the research evolved it quickly encompassed other staff and in turn I was involved in ensuring that staff became positively engaged with the project. The research has successfully ensured that staff focus on learning in general, the children’s learning, their own learning and the relationship between these. I believe that my research shows that the LDAs can lead to positive changes in pedagogy and the children’s learning, including their understanding of the learning process. I will continue to be involved in answering this question after my research study is complete.

The procedure involved in the development of the learning typology and, later, the Child Learning Disposition Observation Tool (CLDOT) was a major event in this research and in the Centre for me as manager and for the other practitioners. It is a method that could be adapted by other settings with different age groups of children. This could involve:

- A meeting and discussion with staff about learning. An example of the agenda might be; what does learning look like for a particular group of children, what are the children doing, are there any adults involved and what is their part in the learning?
- A second meeting with individual staff to discuss: what skills the children use to learn; how staff can support children's development; can these skills be placed in a hierarchy to support learning?
- A typology introducing learning categories and the main characteristics could be produced from these meetings, discussed and agreed.
- A further meeting with staff to moderate and agree descriptions for the characteristics could follow. These could then be adapted into an observation tool, such as the CLDO, that could be used for child observations.
- The observation tool could then be linked into an LDA cycle (Figure 6) ensuring that child observations lead to improvement in pedagogy and practice and involve children in the learning process.

I have recently read new research into how best to enable young children to reflect on their own learning and increase their metacognitive experiences. It would have been beneficial for my research if I had been aware of this research before undertaking this part of my study. Carr (2011) proposes more effective ways of discussing learning with children. Instead of asking questions, the project uses other approaches to encourage learning conversations. Some of these strategies include using wall displays, looking at portfolios, individually and in groups, and using visual stimulus to initiate the discussions. The aim of each of these was to encourage children to be co-authors of the conversation with the adult. This was a skilled role and required considerable time for the practitioner to master. Carr (2011, p.258) says

One of the reasons for enabling children to reflect on their learning is to contribute to their developing views about how they learn, and their identities as learners; these views may be established in the early years and are often resistant to change.

Carr also states a variety of strategies that work well when revisiting learning with children. She connected these reflective sessions with the development of children's learning dispositions, and their learning about how they learn.

Early years education and how best to support our youngest and most vulnerable children is a crucial concern in education. This research study aimed to help practitioners in the Centre provide excellence in the care and education we provide for our children aged 24 to 48 months. It is my intention to promote the findings of my study to as wide an audience as possible. It has relevance to those countries that focus on outdoor education, such as in Scandinavia or Ireland, and more generally where early years professionals are researching children's learning, early years pedagogy and reflection.

My research study has included exploration of some of the practices and routines at the Early Years Centre involved in this research. I have been able to study some aspects in depth and others require study at a later date, such as why some children, when presented with planned learning opportunities or environment, follow a different course; and the part the adult plays in this. The relationship between the adult's role in play and what children choose to learn requires further discussion. McInnes *et al.*, (2011, p.124) propose that:

Children who practice a task under playful practice conditions (on the floor, adult nearby, choice) show superior performance and behaviours conducive to learning compared with children in a formal practice condition (at a table, adult present, no choice).

I believe my research findings can add to the general debate about what is good early years practice, even though undertaken with a small group of children in a specific setting. My findings particularly comment on child observations, pedagogy regarding the inside and outside environments, how young children learn and issues of reflective practice and staff development. In particular my findings add commentary in the following areas:

- The Child Learning Disposition Observation tool, as a means of assessment, considers the whole child in a natural way, rather than assessing them against preconceived targets or outcomes.

The CLDOT accounts for that fact that many young children will not perform their best in a set test situation.

- The CLDOs undertaken have shown that children do not change their learning dispositions dramatically whether they are learning inside or outside. This change is connected more to the skill level and sensitive interaction and questioning of the adult.
- Young children do not learn in a compartmentalised way; therefore assessment should not be designed in this way.
- Young children do not benefit from constant challenge, but require quiet times for reflection and consolidation.
- Young children benefit from deep exploration, reflection and return to activities.
- The relationship between the child and the adult is of utmost importance when learning together.
- Young children love to learn when there is an element of fun involved.
- Staff need practical and objective guidance to deepen their reflections and to enable them to develop this work with young children.
- Real improvements in the early years must be initiated by staff reflecting on their own practice and then changing that practice.
- Staff need to talk to the children about learning; sharing their own learning; and this can have a positive impact on the children's learning. It can help children gain the metacognitive experiences to develop further as learners.
- My observations have shown me that the closer an early years practitioner's planning is to the actual practice; the more the adult understands and can participate in the children's learning.

It is important that the findings of this research have a positive impact, not only on the learning of the children involved with the research study, but for all young children at the Centre. This can be achieved through sharing the outcomes with the children's main carers, with staff and other early years professionals. The following actions are planned:

- **Foundation Phase Profiles.** When the children's learning dispositions have been observed, assessed and recorded in their individual Foundation Phase profiles this is discussed with parents. We will, also, in the future, be talking to the parents about sharing their learning strategies and memory skills with the children at home in a natural way.

- **Displays** at the Centre will contain an explanation of the learning skills the children used to make the display or artwork.
- During **Open Evenings** staff will discuss with parents their children's learning disposition observations.
- A summary of the research will be presented at **Governing Body and Parent Forum Meetings**.
- Presentations on the research study will be made at **early years training and conferences**.
- A **timetable** will be developed to ensure that all staff benefit from the experience of completing the LDA cycle and that lessons learned are disseminated to all staff.
 - We will aim to
 - Develop new ways of using the results of these cycles to improve practice. Find new teaching methods through sharing our learning experiences with the children.
 - Embed these changes in our practice, discuss and model the ideas regularly with the children.

The action research approach contained in this study has become an ongoing project for me and for staff at the Centre. We are all writing our own 'learning stories' and writing them with young children can only add to the enjoyment and spontaneity of the process. This is an extract from a recent conversation between an adult and a child at the Centre, when the child was recalling an activity that had happened the day before, involving making jewellery from coloured ribbon and pasta: "We had to swirl them, roll 'em like that. When I put pasta I rolled 'em. Someone helped me then I did it on my own." "Who helped you?" "I helped myself." (Child, Age 51 months, Dec. 2011, Research Setting). This exemplifies a common learning process for both children and adults, whereby we move from the known to the unknown, often with the help of others, and always involving our own thoughts and reflections.

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APPENDIX 1 CHILDREN'S PHYSICAL DEVELOPMENT 24 to 48 MONTHS

24months

Knows more body features (<i>Hair, ears and limbs</i>)	
Can handle and hold items appropriately	
Can make big arm and hand movements	
Begins to develop awareness of personal space	
Increases body awareness - <i>evades obstacles, runs safely,</i>	
Can climb 1:2 jump 2:2	
Make a tower of 6 blocks	
Can turn pages of a book	
Able to make controlled mark making movements in circles, zig-zags etc.	
Is able to throw a small ball and bang a drum	

30 months

Beginning to draw with purpose	
Responds physically with same confidence musically and to other stimuli	
Can kick a ball	
Able to thread large items and stick together age appropriate construction	
Can build an 8 block tower	
Turn pages of a book singly	
Rip paper and snip with a scissors	
Runs and able to stop, start on command avoiding obstacles	
Can walk up steps using 1:1 feet	

36 months

Confidently moves using a range of levels, speed and direction	
Able to draw a primitive person and follow a pattern with finger	
Can thread small items	
Able to climb appropriate apparatus with control and balance on 1 foot momentarily	
Responds emotionally/physically to music and other stimuli.	
Clapping to a rhythm/beat	
Experiments with a range of musical instruments	
Explores a range of equipment and can make sensible choices	
Can build a tower of 10 blocks	
Can follow rules of a simple game	
Can send and is beginning to receive an object	
Is aware of their own body in relation to others and objects	
Can ride a tricycle without using pedals.	

42 months

Aware of changes of their own body when exercising	
Can cut along a straight line	
Is able to pour water with little spillages	
Can construct items that are meaningful	
Jumps off of an object and lands appropriately using 2 feet	
Demonstrate increasing skill and control in the use of mark making implements and other small items	
Able to increase control over an object such as a ball – <i>pushing, throwing, catching and kicking</i>	
Able to respond to stimuli by moving in different ways	

48 months

Enjoys physical activity beginning to understand why it is good for you	
Confidently moves in different ways demonstrating increasing coordination	
Confidently able to ride a 3-wheel bicycle including around objects	
Able to develop a movement sequence stillness, action, stillness	
Confidently balances on one leg and hops	
Beginning to Interlock more complex items	
Able to use a marking instrument to form a shape or pattern	
Able to draw a person including arms, legs, torso, facial features and additional features such as hair and clothing	

APPENDIX 2 PARENT QUESTIONS and CONSENT FORMS (DRAFT 1)

I am completing a doctorate research study with Cardiff University. The research involves studying young children and the different methods they use in their learning.

I would like to ask you, the child's main carer, questions about your child regarding their age, interests and discuss with you some of the methods you have seen them use to learn when they are playing and learning at home.

The second part of my research will involve me, the researcher, in observing at regular intervals the children learning at our setting. This process will be a normal part of the nursery day. I will be happy to share this information with you and will give you the opportunity to do this throughout the period of my research.

All information concerning the children will be anonymous in the published documentation.

This research will take place over 2 to 3 years the results will be used to improve our understanding of how young children learn and to develop new teaching strategies that can be used to help children of this age learn in the ways best suited to them.

Questions

Child's name _____

Age Y _____ M _____ Gender B/G Position in Family _____

LEARNING CHARACTERISTICS

My child enjoys listening to story will choose to listen to story likes looking at the pictures, wants to join in with the story prefers to be read to

My child likes colouring using construction imaginary play

My child uses symbols and imagination when playing

My child enjoys boisterous active play and running around

My child's favourite play _____

GENERAL LEARNING DISPOSITION

AT HOME

ACTIVE ADAPTABLE APPREHENSIVE DETAILED EXPLAINER
IMAGINATIVE METHODICAL NOISY NOVELTY PASSIVE PATIENT
ROUTINE SELECTIVE SOCIAL THINKER

APPENDIX 2 PARENT QUESTIONS and CONSENT FORMS (DRAFT 2)

Child's Name _____ D.o.b. _____

Age Y _____ M _____ Gender B/G _____ Date Form Completed _____

LEARNING CHARACTERISTICS

My child enjoys listening to story _____ will choose to listen to story _____ likes looking at the pictures, wants to join in with the story _____ prefers to be read to _____

My child likes colouring _____ using construction _____ imaginary play (cars garage, house, prams, and dolls) _____

My child uses symbols and imagination when playing
(Child plays with item pretending it is something else) _____

My child enjoys boisterous active play and running around _____

My child's favourite play _____

GENERAL LEARNING DISPOSITION

AT HOME

ACTIVE ADAPTABLE APPREHENSIVE EXPLAINER DETAILED
IMAGINATIVE METHODICAL NOISY NOVELTY PASSIVE PATIENT
ROUTINE SELECTIVE SOCIAL THINKER
ADULT ATTENTION CONSTANTLY REASSURANCE PURPOSEFULLY

SIGNED _____ DATED _____

APPENDIX 3 STAFF MEMBER QUESTION and CONSENT FORM (Draft 1)

Staff member signed consent _____ Date _____

Child's Name _____

CHILD'S SOFT SKILL SCORES AND DESCRIPTION

SOFT SKILL	SCORE	DESCRIPTION
CONFIDENCE		
COMMUNICATION		
CARE		
PERSEVERANCE		
CREATIVITY		
CO-OPERATION		

CHILD'S FORMAL TEST SCORES

S.O.G.S.					

	P&S	OA	OB	R	W	N	MLSS
1 ST assessment							
Baseline							
Final assessment							

Please describe the child's play characteristics

EMOTIONAL LITERACY

Can recognise feelings	fully	most of the time	part of the time	not at all
Can express feelings	fully	most of the time	part of the time	not at all
Can control emotions	fully	most of the time	part of the time	not at all
Can empathise with other	fully	most of the time	part of the time	not at all

GENERAL LEARNING DISPOSITION

IN SCHOOL GENERAL OBSERVATION

ACTIVE ADAPTABLE APPREHENSIVE DETAILED EXPLAINER

IMAGINATIVE METHODICAL NOISY NOVELTY PASSIVE PATIENT

ROUTINE SELECTIVE SOCIAL THINKER

APPENDIX 3 QUESTION and CONSENT FORM STAFF MEMBER (Draft 2)

Staff member signed consent _____ Date _____

Child's Name _____

CHILD'S SOFT SKILL SCORES AND DESCRIPTION

SOFT SKILL	SCORE	DESCRIPTION
CONFIDENCE		
COMMUNICATION		
CARE		
PERSEVERANCE		
CREATIVITY		
CO-OPERATION		

CHILD'S FORMAL TEST SCORES

S.O.G.S.	LS	MS	VS	HLS	SLS	IS	SCS	CS

	P&S	OA	OB	R	W	N	MLSS
First assessment							
Baseline							
Final assessment							

Please describe the child's play characteristics

EMOTIONAL LITERACY

Can describe feelings	fully	most of the time	part of the time	not at all
Can express feelings	fully	most of the time	part of the time	not at all
Can control emotions	fully	most of the time	part of the time	not at all
Can empathise	fully	most of the time	part of the time	not at all

GENERAL LEARNING DISPOSITION

IN SETTING GENERAL OBSERVATION

ACTIVE ADAPTABLE APPREHENSIVE EXPLAINER IMAGINATIVE
 NOISY NOVELTY PASSIVE PATIENT SELECTIVE SOCIAL
 THINKER

ADULT ATTENTION CONSTANTLY REASSURANCE PURPOSEFULLY

APPENDIX 4 TYPOLOGY OF LEARNING DISPOSITIONS (DRAFT 1)

DESCRIPTOR	CHARACTERISTICS
ACTIVE	Child moves in a variety of ways and has busy hands
ADAPTABLE	Child is comfortable with change and willing to try out new things
APPREHENSIVE	Child is unsure about any experiences needs encouragement to join in with new activities
IMAGINATIVE	Child uses imagination when playing using items for a variety of purposes
METHODICAL	Child sets about an activity knowing what it is they want to do
NOISY	Child is noisy when playing
PASSIVE	Child is not only quiet but shows they are not interested in what is going on around them
PATIENT	Child is able to wait, take turns whilst still maintaining an interest
SOCIAL	Child loves being around their friends, communicating and playing them

DETAILED	Child looks for detail in a new story, activity takes time to observe detail asks lots of questions
EXPLAINER	Child is able to explain verbally what they are doing will talk themselves through an activity
NOVELTY	Child is always seeking new things to do and quickly moves from one activity to another
THINKER	Child is observed to be thinking about things and asks many questions.
ROUTINE	Child likes routine and gets upset if this is changed
SELECTIVE	Child likes to choose some activities and does not like any other experiences or activities

APPENDIX 4 TYPOLOGY OF LEARNING DISPOSITIONS (DRAFT 2)

LEARNING DESCRIPTOR	CHARACTERISTICS
ACTIVE Taking part/ Releasing emotions	Child moves in a variety of ways and has busy hands. Likes to take part, Releases emotions
ADAPTABLE Exploring/Investigating/ Flexible	Child is comfortable with change and willing to try out new things. Spends time exploring and investigating
APPREHENSIVE worried about making a mistake	Child is unsure about any experiences needs encouragement to join in with new activities. Worried about making a mistake
DETAILED	Child looks for detail in a new story, activity takes time to observe detail asks lots of questions
EXPLAINER	Child is able to explain verbally what they are doing will talk themselves through an activity
IMAGINATIVE Creative/Freer/Language	Child uses imagination when playing using items for a variety of purposes. Is creative, confidently enjoys freedom of language and activity
METHODICAL	Child sets about an activity knowing what it is they want to do
NOISY Excitement/Fun	Child is noisy when playing, excited and having fun
NOVELTY	Child is always seeking new things to do and quickly moves from one activity to another
PASSIVE	Child is not only quiet and shows they are not interested in what is going on around them
PATIENT Interested/Stay in one place	Child is able to wait, take turns, remains interested physically stays in one place
ROUTINE	Child likes routine and gets upset if this is changed
SELECTIVE/ I can't	Child likes to choose some activities and does not like any other experiences or activities. Often believes they can't
SOCIAL Peer Adult Good Eye Contact/Body Language/ Cooperation	Child communicates with adults/children and plays with them. Has good eye contact and body language. Is cooperative
THINKER Asking questions/Problem solving	Child is thinking about things and asks many questions. Problem solving
Concentrating/Focussed/ Listening	
Resilience/Perseverance/Dev elopment of activity	

APPENDIX 5 LEARNING DISPOSITION CATEGORIES AND CHARACTERISTICS

CAPABLE LEARNER	NOVICE LEARNER	PRACTISED LEARNER
SOCIAL	SELECTIVE	EXPLAINER
PATIENT	APPREHENSIVE	ADAPTABLE
ACTIVE	PASSIVE	THINKER
NOISY	ROUTINE	METHODICAL
DETAILED	NOVELTY	IMAGINATIVE

APPENDIX 6 CLDOT (DRAFT 1)
This same sheet was used for all four observations.
Adult and child led in both the inside and outside.

Child Setting Time	Description
NOVICE LEARNER	
Selective/I can't	Reason
Apprehensive/ worried about making a mistake	Reason
Passive/Not interested	Reason
Novelty/moves quickly from one thing to another	Reason
Seeks adult attention constantly for reassurance	
CAPABLE LEARNER	
Social/Peer Adult Good Eye Contact/ Body Language Cooperation	Reason
Patient/Interested/Stay in one place	Reason
Active/Taking part/ Releasing emotions	Reason
Noisy/ Excitement/Fun	Reason
Seeks adult purposefully	
PRACTISED LEARNER	
Adaptable/Exploring/ Investigating/ Flexible	Reason
Thinker/ Asking Questions/ Problem solving	Reason
Concentrating/ Focussed/ Listening	Reason
Imaginative/Creative/ Freer/Language	Reason
Resilience/Perseverance Development of activity	

Motivation Responsive /Bold Not responsive Receptive Stimulated	
General Comment Self Confidence Independence Well Being/Happy Recall	
Connection to learning style theory Dunn and Dunn Vermunt Kolb Cullingford	

APPENDIX 6 CLDOT (DRAFT 2)
This same sheet was used for all four observations.
Adult and child led in both the inside and outside.

DATE _____

Child/Setting/Time	Description
NOVICE LEARNER	
Selective/I can't	Reason
Apprehensive/worried about making a mistake	Reason
Passive/Not interested	Reason
Novelty/Moves quickly from one thing to other	Reason
Seeks adult attention for reassurance	
CAPABLE LEARNER	
Social/Peer/ Adult Uses Eye contact/Body language/Cooperation	Reason
Patient/Interested/ Stay in one place	Reason
Active taking part. Releasing emotions	Reason
Noisy/ excitement/fun	Reason
Seeks adult purposefully	
PRACTISED LEARNER	
Adaptable/Exploring /Investigating/Flexible	Reason
Thinker/Asking questions/Problem solving	Reason
Concentrating/ focussed/listening	Reason
Imaginative,/Creative/ Freer Language	Reason
Imaginative/Creative/	Reason
Resilience/Perseverance/ Development of activity	Reason
Motivated/Bold/Independence/Well Being/Recall	

APPENDIX 6 CLDOT (DRAFT 3)
This same sheet was used for all four observations.
Adult and child led in both the inside and outside.

DATE _____

Child Setting/Time	Description
NOVICE LEARNER	
Selective/I won't	Reason
Apprehensive	Reason
Passive/Not interested	Reason
Moves quickly from one thing to another	Reason
Seeks adult attention for reassurance	
CAPABLE LEARNER	
Social/Peer/ Adult Eye contact /Body language/Language	Reason
Patient/ Content	Reason
Takes part/Interested	Reason
Releases Emotion	Reason
Seeks adult purposefully	
PRACTISED LEARNER	
Adaptable	Reason
Explores	Reason
Thinks/ Questions/ Solves problems/Recalls	Reason
Uses language to explore and express	Reason
Engaged 85% concentration	Reason
Imaginative/Creative/	Reason
Perseveres/Self Motivated	Reason
Well Being	

APPENDIX 7 MASTER DATA COLLECTION SHEET

GROUP ? 24 MONTHS CHILD ?	NOVICE LEARNER	CAPABLE LEARNER	PRACTISED LEARNER	CATEGORY
OBSERVATION HOME				
OBSERVATION STAFF				
OBSERVATION ONE				
OBSERVATION SET 1				
1 INSIDE ADULT LED				
2 INSIDE CHILD LED				
3 OUTSIDE ADULT LED				
4 OUTSIDE CHILD LED				
OBSERVATION SET 2				
1 INSIDE ADULT LED				
2 INSIDE CHILD LED				
3 OUTSIDE ADULT LED				
4 OUTSIDE CHILD LED				
OBSERVATION SET 3				
1 INSIDE ADULT LED				
2 INSIDE CHILD LED				
3 OUTSIDE ADULT LED				
4 OUTSIDE CHILD LED				
OBSERVATION SET 4				
1 INSIDE ADULT LED				
2 INSIDE CHILD LED				
3 OUTSIDE ADULT LED				
4 OUTSIDE CHILD LED				
OBSERVATION SET 5				
1 INSIDE ADULT LED				
2 INSIDE CHILD LED				
3 OUTSIDE ADULT LED				
4 OUTSIDE CHILD LED				
OBSERVATION SET 6				
1 INSIDE ADULT LED				
2 INSIDE CHILD LED				
3 OUTSIDE ADULT LED				
4 OUTSIDE CHILD LED				

HOME LEARNING CHARACTERISTICS

FAVOURITE PLAY

SETTING PLAY CHARACTERISTICS

SOFT SKILL	1 ST	End	DESCRIPTION
CONFIDENCE			
COMMUNICATION			
CARE			
PERSEVERANCE			
CREATIVITY			
CO-OPERATION			

EMOTIONAL LITERACY

RECOGNITION	
EXPRESS	
CONTROL	
EMPATHY	

	P&S	OA	OB	R	W	N	MLSS
First assessment							
Baseline							
Final assessment							

S.O.G.S.	LS	MS	VS	HLS	SLS	IS	SCS	CS

OBSERVATION NOTES

SET ONE
SET TWO
SET THREE
SET FOUR
SET FIVE
SET SIX

APPENDIX 8 LDA SHEET

These interactions should be completed with two or more children to encourage peer learning and collaboration. Ample time should be allowed for the children to play around, think about, develop and change the activity. Every effort should be made for these activities to arise from the children's own interests.

Before planning, developing a learning activity think about what you already know about the child.

Name _____ Age _____ Date _____

NL / CL / PL Use previous learning sheets/current assessments

Circle if Activity Adult or Child Led

Background to activity (connection to child, intrinsic reward)

Opportunities for Peer Learning/Collaboration

	Opportunities	Observations
Choice Make Mistakes Be responsible Be Intuitive Solve Problems Think and Question Use Imagination Be Creative Explore Be adaptable Collaboration		

Before activity talk to the children about memory skills; - **repeating action repeating aloud, mark making, association, counting things to be remembered, initial sounds.**

**Throughout activity verbalise learning for children and encourage them to do the same.
 Get children to explain their learning to peers and talk about the importance of friendship to learning.
 Continually ask questions**

After activity

Comment on opportunities and observations

Way Forward Explain to children about any missed opportunities or development of activity

What have you learnt about the child's learning?

N/L Selective/I can't Apprehensive/Passive/Not interested/ Moves quickly from one thing to another

C/L Social/Peer/Adult/Uses eye contact/body language/Language/Patient/Content/Takes part/
 Interested/Releases emotion

P/L Adaptable/Explores/Thinks/Solves problem/Recalls/Uses language to explore and
 express/Engaged/Imaginative/Creative/Perseveres/Self motivated

META COGNITIVE AND LEARNING INFORMATION

Date _____

What did you do? (in learning activity)

Are you a good learner?

Is learning easy or hard?

Do other people help you learn?

Why do you want to learn?

APPENDIX 9 INDIVIDUAL DATA COLLECTION SHEETS
GROUP A CHILD 1

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1 X	3X	3X	CL/PL
OBSERVATION STAFF	3X	3X	2X	NL/CL
OBSERVATION ONE	Receptive, responsive, happy, confident, negotiate			
OBSERVATION SET 1				
1 Inside Adult Led	2X			NL
2 Inside Child Led	1X	2X	1X	CL
3 Outside Adult Led	2X	2X	1X	CL/NL
4 Outside Child Led	1X	2X		CL
OBSERVATION SET 2				
1 Inside Adult Led		3X		CL
2 Inside Child Led	1X	3X		NL/CL
3 Outside Adult Led		2X	1X	CL/PL
4 Outside Child Led		1X		CL
OBSERVATION SET 3				
1 Inside Adult Led	2 X	3 X		CL
2 Inside Child Led		1 X	3 X	PL
3 Outside Adult Led		2 X		CL
4 Outside Child Led	1 X	3 X		CL
OBSERVATION SET 4				
1 Inside Adult Led	1X	1X		CL/PL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		2X		CL
4 Outside Child Led	1X	1X		NL/CL
OBSERVATION SET 5				
1 Inside Adult Led	1X	1X		NL/CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 6				
1 Inside Adult Led		2X		CL
2 Inside Child Led		2X		CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led	1X	2X	1X	CL

HOME LEARNING CHARACTERISTICS

Chooses and enjoys story, joins in, imaginary play, uses symbols enjoys active boisterous play
 Seeks adult attention for reassurance

FAVOURITE PLAY

Playing with everything

SETTING PLAY CHARACTERISTICS

Settled easily good interaction enjoys new experiences understands humour can play with other children enjoys books and songs can be stubborn

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Needs to develop to have a go with less encouragement
COMMUNICATION	1	Needs to share more words with staff
CARE	1	Needs to become more aware of what she is doing
CONCENTRATION	½	Needs to develop on self-chosen tasks
CREATIVITY	1	Needs to stick at a problem for short periods
CO-OPERATION	1	Needs to cooperate with less encouragement

EMOTIONAL LITERACY

REGULATION	Part of the time	EMPATHY	Part of the time
EXPRESS	Full	EMPATHY	Part of the time

	P&S	OA	OB	R	W	N	MLSS
First assessment	7	5	7	8	5	4	4
Baseline	11	9	7	9	8	6	7

SUGS	TS	MS	MS	MS	MS	MS	MS	MS

OBSERVATION NOTES

SET ONE Moves around activities but does focus for short time on each one
SET TWO Independent does her own thing Seeks adult attention purposefully
SET THREE
SET FOUR Needs adult intervention to get her to concentrate and listen
FINAL SET Easily distracted and easily brought back to task

GROUP A CHILD 3

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	3X	CL/PL
OBSERVATION STAFF	2X	2X	3X	PL
OBSERVATION ONE	Responsive, quietly confident, happy, observing			
OBSERVATION SET 1				
1 Inside Adult Led	2X			CL
2 Inside Child Led	2X			CL
3 Outside Adult Led	2X		1X	CL
4 Outside Child Led	3X		3X	CL/NL
OBSERVATION SET 2				
1 Inside Adult Led		2X		
2 Inside Child Led		3X		
3 Outside Adult Led	1X	2X		
4 Outside Child Led		3X		
OBSERVATION SET 3				

1 Inside Adult Led		3X		
2 Inside Child Led	1X	2X		
3 Outside Adult Led	1X			
4 Outside Child Led		4X		
OBSERVATION SET 4				
1 Inside Adult Led		2X	1X	
2 Inside Child Led		2X		
3 Outside Adult Led		3X		
4 Outside Child Led		3X		
HOME LEARNING CHARACTERISTICS Listening to story read to looking at pictures, likes colouring construction, uses symbols active boisterous play Seeks adult attention purposefully FAVOURITE PLAY Football, cars and colouring SETTING PLAY CHARACTERISTICS Very quiet, physically small premature good interaction and problem solving not much speech finds his own things to play with.				

OBSERVATION NOTES

SET ONE He has missed a lot of sessions but remembers everything when he returns
SET TWO Very quiet preferred doing his own thing in own space joins in when he wants to Seeks adult attention purposefully
SET THREE
SET FOUR Very quiet waiting for adult to initiate activity conversation

GROUP A CHILD 5

GROUP A CHILD 5				
24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	4X	4X	4X	CL/NL/PL
OBSERVATION STAFF	4X	2X	3X	NL
OBSERVATION ONE	Confident receptive responsive, independent, Developed activity			
OBSERVATION SET 1				
1 Inside Adult Led	4X		3X	NL
2 Inside Child Led	4X		1X	NL
3 Outside Adult Led	3X		3X	NL/PL
4 Outside Child Led	4X		3X	NL
OBSERVATION SET 2				
1 Inside Adult Led		2X		CL
2 Inside Child Led		3X		CL
3 Outside Adult Led		2X		CL
4 Outside Child Led		1X		CL
OBSERVATION SET 3				
1 Inside Adult Led				
2 Inside Child Led		4X		CL
3 Outside Adult Led		3X	1X	CL

4 Outside Child Led		3X		CL
OBSERVATION SET 4				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led	2X			NL
3 Outside Adult Led		3X	2X	CL
4 Outside Child Led	1X	2X		CL
OBSERVATION SET 5				
1 Inside Adult Led		3X	2X	CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 6				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		1X	2X	PL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		3X		CL

HOME LEARNING CHARACTERISTICS

Chooses and listens to story, joins in looks at pictures, prefers to be read to Likes colouring, construction, imaginary play uses symbols active boisterous play

FAVOURITE PLAY

Thomas Tank train track and Fireman Sam

SETTING PLAY CHARACTERISTICS

Quiet but settled easily likes a lot of adult attention able to role play with other children.

Good imagination. Likes books and stories and being read to

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Rely less on adults
COMMUNICATION	1	Needs to talk to friends more
CARE	1	Needs to show his caring side
CONCENTRATION	1½	Needs to concentrate more on teacher led tasks
CREATIVITY	1	Needs to have a go for longer before asking for help
CO-OPERATION	1	Needs to play more with friends rather than alongside

EMOTIONAL LITERACY

RECOGNITION	Most of the time	CONTROL	Part of the time
-------------	------------------	---------	------------------

	P&S	OA	OB	R	W	N	MLSS
First assessment	12	11	10	6	6	4	4
Baseline	12	12	11	10	10	10	12

S.O.G.S.	TS	MS	VS	HL5	SL5	IS	SCS	CS

OBSERVATION NOTES

SET ONE One of few children who was able to develop activity

SET TWO Seeks adult attention purposefully
SET THREE
SET FOUR
FINAL SET Happy and content in environment but still often seeks adult attention

GROUP A CHILD 6

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1X	3X	2X	CL
OBSERVATION STAFF				
OBSERVATION ONE	Confident, happy responsive independent			
OBSERVATION SET 1				
1 Inside Adult Led		2X	1X	NL
2 Inside Child Led	3X		1X	NL
3 Outside Adult Led	2X		1X	NL
4 Outside Child Led	1X			NL
OBSERVATION SET 2				
1 Inside Adult Led		4X	1X	CL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		3X		CL
OBSERVATION SET 3				
1 Inside Adult Led		3X		CL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led	1X	2X		CL
4 Outside Child Led		3X	2X	CL
OBSERVATION SET 4				
1 Inside Adult Led		2X		CL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		1X	1X	CL/PL
OBSERVATION SET 5				
1 Inside Adult Led		4X		CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 6				
1 Inside Adult Led		1X	3X	PL
2 Inside Child Led		2X	2X	CL/PL
3 Outside Adult Led		2X	3X	PL
4 Outside Child Led		2X	3X	PL

HOME LEARNING CHARACTERISTICS

Likes colouring, imaginary play and uses symbols in play wants to join in with story

FAVOURITE PLAY Hide and Seek			
SETTING PLAY CHARACTERISTICS Settled easily can be stubborn interacts well eager to join in new experiences funny and good understanding of humour. Plays with other children and enjoys books and songs			
SOFT SKILL	1st	End	DESCRIPTION
CONFIDENCE	1½		Have a go with less encouragement
COMMUNICATION	1½		Talk in more detail to adults
CARE	1½		Needs to talk about what we do to be kind
CONCENTRATION	1½		Needs to concentrate for longer periods less distraction
CREATIVITY	1½		Needs to try for longer periods before asking for help
CO-OPERATION	1½		Needs to have a go even if not sure what is expected

REPRESENTATION	100%	CONTROL	Part of the time
EXPRESSION	Part of the time	CONTROL	Part of the time

	P&S	OA	OB	R	W	N	MLSS
First assessment	12	11	10	8	8	6	6
Baseline	12	12	11	9	10	8	11

100%	100%	100%	100%	100%	100%	100%	100%

OBSERVATION NOTES

SET ONE Seeks adult attention for reassurance, perseveres to make matching activity perfect
SET TWO Seeks adult attention purposefully able to recall cooperates when she wants to
SET THREE
SET FOUR Confident and comfortable in environment
FINAL SET Happy and content in school environment

GROUP B CHILD 1

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	2X	CL
OBSERVATION STAFF	3X	3X	5X	PL
OBSERVATION ONE	3X		1X	CL
OBSERVATION SET 1				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		1X		CL
3 Outside Adult Led		2X		CL
4 Outside Child Led		2X		CL
OBSERVATION SET 2				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		1X	1X	CL\PL
4 Outside Child Led		2X	2X	CL\PL

OBSERVATION SET 3				
1 Inside Adult Led		2 X	2 X	CL/PL
2 Inside Child Led		4 X	2 X	CL
3 Outside Adult Led		3 X	1 X	CL
4 Outside Child Led		2 X	1 X	CL
OBSERVATION SET 4				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	2X	CL/PL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		3X		CL
OBSERVATION SET 5				
1 Inside Adult Led				
2 Inside Child Led				
3 Outside Adult Led		1X	3X	PL
4 Outside Child Led		3X		CL

HOME LEARNING CHARACTERISTICS

Likes looking at pictures, wants to join in with story, using construction, likes active boisterous play.

FAVOURITE PLAY

Cars, sitting in car and pretending to drive, animals

SETTING PLAY CHARACTERISTICS

Excellent language loves to play outdoors, books, can play on own and in a group loves active messy play. Anticipates in his play good all rounder.

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Encourage Daniel to ask questions
COMMUNICATION	2	Needs to talk in from of whole class next
CARE	2	Needs to develop emotional vocabulary
CONCENTRATION	2	Needs to persevere with activity he may not choose
CREATIVITY	2	Needs to share ideas with friends
CO-OPERATION	2	Needs to work more effectively in group

EMOTIONAL LITERACY

RECOGNITION	Labels	EXPRESSION	Part of the time
EXPRESSION	Labels	EMPATHY	Part of the time

	P&S	OA	OB	R	W	N	MLSS
First assessment	12	12	11	8	8	6	6

SOFT SKILL	1 ST	2 ND	3 RD	4 TH	5 TH	6 TH	7 TH	8 TH

OBSERVATION NOTES

SET ONE Developed pouring activity to include narrow tubes Confident independent responsive able to persevere with task always aware that I was observing him

SET TWO Seeks adult attention and can sustain conversation

SET THREE
SET FOUR Good recall and memory
SET FIVE FINAL SET Remembered fact about the worm
ASSESSMENT LEARNING CHARACTERISTICS Finds it difficult to take on different points of view about the same thing. Has a good memory and likes playing with others and being an important part of the group this May or not may be because he has a good idea
META COGNITION
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY Talk to the children about how they learn how they remember things Choice about activity as well as within activity Choice of activity does not guarantee engagement

GROUP B CHILD 4

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	3X	4X	4X	CL/PL
OBSERVATION STAFF	4X	1X	1X	NL
OBSERVATION ONE			3X	PL
OBSERVATION SET 1				
1 Inside Adult Led	1X	1X		CL/NL
2 Inside Child Led		2X	2X	CL/NL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X	2X	CL/NL
OBSERVATION SET 2				
1 Inside Adult Led	1X	2X		CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X		CL
OBSERVATION SET 3				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		3X	3X	CL/PL
3 Outside Adult Led		2X	2X	CL/PL
4 Outside Child Led		3X		CL
OBSERVATION SET 4				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		2X		CL
3 Outside Adult Led	1X	1X		NL/CL
4 Outside Child Led		3X		CL
OBSERVATION SET 5				
1 Inside Adult Led				
2 Inside Child Led				
3 Outside Adult Led		1X	3X	PL
4 Outside Child Led				

HOME LEARNING CHARACTERISTICS

Wants to join in with story, likes pictures, plays imaginatively enjoys boisterous play

FAVOURITE PLAY

Outside with mud and small cars

SETTING PLAY CHARACTERISTICS

Quiet, watches play and dips in but not consistent, quite shy. Parallel play

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Needs to develop confidence
COMMUNICATION	½	Needs to talk more readily to adults and peers
CARE	½	Needs to consider needs of others
CONCENTRATION	½	Needs to concentrate on teacher led activities
CREATIVITY	½	Needs to use variety of equipment to develop imagination
CO-OPERATION	½	Needs to respond to requests of adults and peers

EMOTIONAL ATTRIBUTES

Metacognition	Metacognitive skills	Emotional skills	Personal skills
Expressive	Metacognitive skills	Emotional skills	Personal skills

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	10	7	8	7	5	4	4
National baseline	10	8	9	8	4	7	6
End of baseline	12	11	10	8	7	8	8

S.O.G.S.	LS	MS	VS	HLS	SLS	IS	SCS	CS
30m	30m	24m	24m	24m	30m	30m	36m	18m

OBSERVATION NOTES

SET ONE Confident happy receptive and responsive independent
SET TWO Happy to play on his own sought adult attention when wanted it independent
SET THREE Very quiet
SET FOUR Often seeks approval of peers for learning
FINAL SET More confident in the outdoors adaptable because didn't immediately find worms and had to change plans James was able to be responsible for his tool
ASSESSMENT LEARNING CHARACTERISTICS Very nervous child and this affects his learning because he worries about being wrong. Very sociable likes looking after younger children and this may give him confidence but this means he does not mix with peers who could help him with his learning
META COGNITION
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY Lots of talk happening with children but not necessarily about their learning Talk to the children about how they learn how they remember things Choice about activity as well as within activity Choice of activity does not guarantee engagement

GROUP B CHILD 5

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1X	4X	2X	CL
OBSERVATION STAFF	2X	4X	2X	CL
OBSERVATION ONE		2X		CL
OBSERVATION SET 1				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		3X	2X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		2X	2X	CL/PL
OBSERVATION SET 2				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		1X	1X	CL/PL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 3				
1 Inside Adult Led		2X		CL
2 Inside Child Led		3X	3X	CL/PL
3 Outside Adult Led		4X	1X	CL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 4				
1 Inside Adult Led		2X		CL
2 Inside Child Led		2X	2X	CL/PL
3 Outside Adult Led		2X		CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 5				
1 Inside Adult Led				
2 Inside Child Led				
3 Outside Adult Led		1X	3X	PL
4 Outside Child Led		1X	3X	PL

HOME LEARNING CHARACTERISTICS

Prefers to be read to, likes looking at pictures, imaginative play and uses symbols, enjoys boisterous active play

FAVOURITE PLAY

Cars, garage noted two schemas. Lining up and enclosing

SETTING PLAY CHARACTERISTICS

Sociable, happy to be involved and can play on his own, settled easily into nursery, not very verbal

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Needs to ask if unsure no need to worry
COMMUNICATION	2	Needs to talk more readily in front of class
CARE	3	Needs to develop so that he can talk about how he can affect the emotions of others

CONCENTRATION	2		Needs to concentrate more despite distractions
CREATIVITY	1		Needs to think longer about solution to problems
CO-OPERATION	3		Needs to alter his role within a group to be leader

RELATIONSHIPS	Part of the time	FUNCTION	Part of the time
EXPRESS	Most of the time	EMPHASIS	Part of the time

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	11	11	11	8	5	4	5
National Baseline	12	12	10	8	7	11	6
End of Baseline	12	12	11	10	8	12	10

SET ONE	12	12	12	12	12	12	12	12
SET TWO	12	12	12	12	12	12	12	12

OBSERVATION NOTES

SET ONE Seeks adult attention purposefully Confident happy responsive Independent

SET TWO Bold independent Seeks adult attention purposefully

SET THREE Good recall

SET FOUR No adult required

FINAL SET Good question and answer remembered more obscure facts about worms

Lots of questions and answers but not focussed on learning opportunity

Responsible helping to tidy up even though enjoying activity

ASSESSMENT LEARNING CHARACTERISTICS

Very sociable learner can be erratic with learning not in personality sometimes says pertinent things other times talks off point. Happy to be part of group kind to others doesn't have to be in charge helps others learn and he learns from his peers

META COGNITION

Connected strength to being good at learning and remembering things

DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY

Adaptable

Talk to the children about how they learn how they remember things

Choice about activity as well as within activity

Choice of activity does not guarantee engagement

GROUP B CHILD 6

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1X	4X	4X	CL/PL
OBSERVATION STAFF	2X	3X	1X	CL
OBSERVATION ONE	1X	2X	1X	CL
OBSERVATION SET 1				
1 Inside Adult Led		1X	1X	CL/PL
2 Inside Child Led		3X	3X	CL/PL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led	1X	2X		CL

OBSERVATION SET 2				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	3X	PL
3 Outside Adult Led	1X	3X	2X	CL
4 Outside Child Led		4X	1X	CL
OBSERVATION SET 4				
1 Inside Adult Led		1X	1X	CL/PL
2 Inside Child Led		4X		CL
3 Outside Adult Led		4X	1X	CL
4 Outside Child Led		3X		CL
OBSERVATION SET 4				
1 Inside Adult Led		2X		CL
2 Inside Child Led		3X	2X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 5				
1 Inside Adult Led				
2 Inside Child Led				
3 Outside Adult Led				
4 Outside Child Led		1X	3X	PL

HOME LEARNING CHARACTERISTICS

Enjoys listening to stories, likes looking at pictures Likes colouring and imaginary play

Uses symbols and imagination

Enjoys boisterous active play

FAVOURITE PLAY

Cars

SETTING PLAY CHARACTERISTICS

Settled easily into nursery setting, parallel play, ego centric

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	3	Needs to develop confidence fully not worry if questioned
COMMUNICATION	3	Needs to add describing words to vocabulary
CARE	3	Needs to extend emotional vocabulary to help him understand his feelings
CONCENTRATION	2	Needs to think about how his actions can stop others from concentrating
CREATIVITY	3	Needs to worry less of things don't work out
CO-OPERATION	3	Needs to be able to change role in play sequence

EMOTIONAL LITERACY

IDENTIFICATION	Part of the time	FUNCTION	Expressed the time
EXPRESS	Most of the time	IDENTITY	Needs of the time

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	9	8	7	7	4	5	4
National Baseline	12	12	10	9	9	10	7
End of Baseline	12	12	11	10	9	12	10

SALES	15	18	12	11	10	12	15

OBSERVATION NOTES

SET ONE Very confident responsive asks questions moved around a lot but did focus on each activity independent

SET TWO XXX is bold has good recall confident knows exactly what he wants to do

SET THREE Completely independent

SET FOUR Very good interaction with other children

FINAL SET Happy in group play but wanted to maintain his position within the group organising his own role within the group

ASSESSMENT LEARNING CHARACTERISTICS

Knows his own mind and this affects learning because he will only learn what he wants to has excellent vocabulary and knows about a lot of things Very sociable likes to be in with a group. Able to question appropriately in order to learn more

META COGNITION

DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY

Talk to the children about how they learn how they remember things

Choice about activity as well as within activity

Choice of activity does not guarantee engagement

GROUP C CHILD 1

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	4X	P/L
OBSERVATION STAFF	3X	4X	3X	C/L
OBSERVATION ONE	1X	2X		C/L
OBSERVATION SET 1				
1 Inside Adult Led	1X		1X	CL/PL
2 Inside Child Led	1X	1X		CL/NL
3 Outside Adult Led	1X		1X	CL/PL
4 Outside Child Led	3X		3X	CL/PL
OBSERVATION SET 2				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		2X		CL
3 Outside Adult Led	1X	1X	1X	NL/CL/PL
4 Outside Child Led		3X		CL
OBSERVATION SET 3				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		1X	1X	CL/PL

3 Outside Adult Led		4X		CL
4 Outside Child Led		3X		CL
OBSERVATION SET 4				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		1 X		CL
3 Outside Adult Led		4X	1X	CL
4 Outside Child Led		3X		CL
OBSERVATION SET 5				
		1X	4X	PL
	Not settled to anything			NL

HOME LEARNING CHARACTERISTICS

Looking at pictures, using construction and imaginary play cars, uses symbols, enjoys boisterous active play

FAVOURITE PLAY Cars

SETTING PLAY CHARACTERISTICS

Likes routine playing with familiar things will try new things only after builds up familiarity. Initial thoughts might have behaviour problems but this no longer issue

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Encourage confidence to ask question
COMMUNICATION	2	Needs to talk in front of class
CARE	2	Encourage to talk about how others might feel
CONCENTRATION	2	Concentrate for longer periods
CREATIVITY	2	Think more about activities and share with others
CO-OPERATION	2	Become less concerned when routines change

EMOTIONAL LITERACY

RECOGNITION	Score: 100/100	100/100	Score: 100/100
EXPRESSION	Score: 100/100	100/100	Score: 100/100

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	8	6	5	6	6	4	4
National Baseline	12	11	9	9	7	7	5
End of Baseline	12	12	11	10	10	12	8

5.0/5	1.5	MS	VS	11.5	ST.5	7.5	MS	1.5
11.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5

OBSERVATION NOTES

SET ONE Responsive to environment confident independent happy in himself but doing his own thing

SET TWO Seeks adult attention purposefully Bold independent organiser of play

SET THREE

SET FOUR Seems to score better with adult attention and guidance

FINAL SET In play situation not really settled to anything during observation period Worm needs to look like worm limited imagination
ASSESSMENT LEARNING CHARACTERISTICS Capable learner likes to explore and look at things but only focuses on those things that interest him. Can sometimes need encouragement to concentrate sometimes stubborn has definite likes and dislikes and this can impact on his learning
META COGNITION Mason likes to watch others
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY Children able to decide when they have finished Give children time and encourage them to talk to one another Can children make good educated guesses Limited imagination because preconceived idea about what final outcome will look like Self chosen play does not always mean engagement

GROUP C CHILD 2

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1X	3X	4X	P/L
OBSERVATION STAFF	3X	2X	2X	N/L
OBSERVATION ONE		1X	1X	C/L P/L
OBSERVATION SET 1				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 2				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X	2X	CL/PL
OBSERVATION SET 3				
1 Inside Adult Led		3X		CL
2 Inside Child Led		2X	2X	CL/PL
3 Outside Adult Led		4X		CL
4 Outside Child Led				
OBSERVATION SET 4				
1 Inside Adult Led		3X		CL
2 Inside Child Led		2X		CL
3 Outside Adult Led		2X		CL
4 Outside Child Led		3X	2X	CL
OBSERVATION SET 5				
1 Inside Adult Led		1X	3X	PL
2 Inside Child Led		1X	4X	PL
3 Outside Adult Led				

4 Outside Child Led				
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HOME LEARNING CHARACTERISTICS

Likes looking at pictures, colouring, construction imaginary play. Uses symbols and imagination enjoys boisterous active play

FAVOURITE PLAY

Trucks and cars, pretend cooking

SETTING PLAY CHARACTERISTICS

Took long time to settle likes to play on own will join in with encouragement, loves outdoor play. Developed social skills since starting Flying Start. Poor language, babbling stage

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE		Did not complete soft skills
COMMUNICATION		
CARE		
PERSEVERANCE		
CREATIVITY		
CO-OPERATION		

EMOTIONAL LEARNING

RECOGNISE	Not at all	Extremely	Not at all
EXPRESS	Not at all	Extremely	Not at all

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	5	4	4	4	4	4	4
National Baseline	12	11	9	8	8	9	6
End of Baseline	12	12	11	9	8	9	8

50%	100%	50%	100%	100%	50%	100%	50%	100%
35 m	100	50	100	100	50	100	50	100

OBSERVATION NOTES

SET ONE Responsive happy observing Able to persevere and develop activity confident
SET TWO Seeks adult attention purposefully Motivated to learn
SET THREE Independent player
SET FOUR Interested and engaged with activities
FINAL SET Thomas able to explain to adult what he was doing
ASSESSMENT LEARNING CHARACTERISTICS
Capable learner definite likes and dislikes won't focus on anything not in his interest can work well in group is they are from his selected friends
META COGNITION
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY
Free play no adult involvement
Sometimes we ask questions but there is no follow through

GROUP C CHILD 3

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	3X	C/L P/L
OBSERVATION STAFF	2X	4X	3X	C/L
OBSERVATION ONE				
OBSERVATION SET 1				
1 Inside Adult Led		1X	1X	CL/PL
2 Inside Child Led		4X	2X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		1X	1X	CL/PL
OBSERVATION SET 2				
1 Inside Adult Led		2X		CL
2 Inside Child Led	1X	1X	3X	PL
3 Outside Adult Led		2X	3X	PL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 3				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		3X		CL
4 Outside Child Led				
OBSERVATION SET 4				
1 Inside Adult Led		4X		CL
2 Inside Child Led		1X	1X	CL/PL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X		CL
OBSERVATION SET 5				
1 Inside Adult Led		1X	4X	PL
2 Inside Child Led			3X	PL
3 Outside Adult Led				
4 Outside Child Led				

HOME LEARNING CHARACTERISTICS

Enjoys listening to story, likes colouring, uses symbols and imagination enjoys boisterous active play

FAVOURITE PLAY

Jigsaws, reading, blocks, likes company

SETTING PLAY CHARACTERISTICS

Settled quickly, loves to help, joins in with group activities and can play on his own. Good speech

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Needs to develop confidence with staff and peers
COMMUNICATION	1	Needs to speak in more detail to staff
CARE	1	Needs to learn how to show his caring nature
CONCENTRATION	1	Needs to concentrate for lengthening periods

CREATIVITY	1		Needs to persevere for longer on problem solving
CO-OPERATION	1		Can cooperate with peers in play situation

EXPRESSIONS OF EMOTION

REFLECTIVE THOUGHTS	Most of the time	EMOTIONAL	Most of the time
EXPRESSIONS	Most of the time	EMPATHY	Most of the time

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	9	7	7	4	5	5	4
National Baseline	12	11	10	9	6	10	6
End of Baseline	12	12	11	10	9	12	10

SCHOOL	IS	NOT	NOT	NOT	NOT	NOT	NOT	NOT

OBSERVATION NOTES

SET ONE Responsive confident independent
SET TWO Social apologised to friend for pushing accidentally
SET THREE Bold and physical
SET FOUR Confident seems to need adult guidance to improve learning
FINAL SET Cody the leader within this group able to develop from other children's suggestions
ASSESSMENT LEARNING CHARACTERISTICS Enthusiastic about most things and will learn at every opportunity. He is social and caring especially for younger children. Likes sharing with others and explaining what to do Good vocabulary diction poor
META COGNITION
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY Free play no adult involvement Important opportunity missed here to encourage sustained shared thinking from children's play

GROUP C CHILD 4

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1	4	5	P/L
OBSERVATION STAFF	5	3	5	NL /PL
OBSERVATION ONE	1	1	1	C/LN/LP/L
OBSERVATION SET 1				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	3X	PL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 2				
1 Inside Adult Led		3X	2X	CL
2 Inside Child Led		2X	2X	CL/PL

3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 3				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		3X	4X	PL
3 Outside Adult Led		4X		CL
4 Outside Child Led	1X	1X		NL/CL
OBSERVATION SET 4				
1 Inside Adult Led				
2 Inside Child Led			1X	PL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		4X		CL
OBSERVATION SET 5				
1 Inside Adult Led		1X	5X	PL
2 Inside Child Led			4X	PL
3 Outside Adult Led				
4 Outside Child Led				

HOME LEARNING CHARACTERISTICS

Enjoys listening to story, will choose to listen to story, likes looking at pictures, wants to join in with story, prefers to be read to. Likes colouring, using construction, imaginary play.

Uses symbols and imagination, likes active boisterous play.

FAVOURITE PLAY

Enjoys everything and likes interaction with others

SETTING PLAY CHARACTERISTICS

Loves to sing good with action songs, listen to story, brilliant imaginative play. Loves painting, colour drawing, good language. Took while to settle

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	3	Needs to develop confidence to speak in large groups
COMMUNICATION	3	Needs to use describing words more
CARE	3	Needs to understand how her actions can have impact on others
CONCENTRATION	3	Good concentration needs on occasions to chat less
CREATIVITY	3	Needs to extend problem solving to a variety of tasks
CO-OPERATION	3	Needs to readily cooperate on all tasks

FUNCTIONAL LITERACY

RECOGNITION	Meaning	Accuracy	Fluency
EXPRESSION	Meaning	Accuracy	Fluency

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	9	7	9	7	5	5	4
National Baseline	12	12	10	9	9	10	6

End of Baseline	12	12	12	12	11	12	10
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SET ONE	12	12	12	12	11	12	10
SET TWO							
SET THREE							
SET FOUR							

OBSERVATION NOTES

SET ONE Confident responsive able to recall happy
SET TWO Independent bold knew exactly what wanted to do
SET THREE Independent and focussed
SET FOUR As above
FINAL SET Absorbed in own storyline no need for anyone else used lots of imagination Knew when she had finished and let the story play go No adult near or intervention
ASSESSMENT LEARNING CHARACTERISTICS Very creative fabulous imagination sociable with everyone has to finish what she is saying Uses language to explore and express is talkative strong willed and will follow her own interests if the situation arises
META COGNITION
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY involved in free play no adult interaction

GROUP C CHILD 5

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	2X	CL
OBSERVATION STAFF				
OBSERVATION ONE	Has one special friend			
OBSERVATION SET 1				
1 Inside Adult Led			1X	PL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		4X		CL
OBSERVATION SET 2				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led	1X	2X		CL
3 Outside Adult Led	2X	2X		CL/PL
4 Outside Child Led		4X		CL
OBSERVATION SET 3				
1 Inside Adult Led	1X	4X	2X	CL
2 Inside Child Led		4X		CL
3 Outside Adult Led		3X	2X	CL
4 Outside Child Led		4X	1X	CL
OBSERVATION SET 4				
1 Inside Adult Led				
2 Inside Child Led		2X		CL

3 Outside Adult Led		3X	2X	CL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 5				
1 Inside Adult Led		1X	3X	PL
2 Inside Child Led		1X	3X	PL
3 Outside Adult Led				
4 Outside Child Led				

HOME LEARNING CHARACTERISTICS

Chooses joins in and listens to story, likes looking at pictures prefers to be read to likes construction imaginary play is boisterous and active Seeks adult attention constantly

FAVOURITE PLAY

Scooter outside

SETTING PLAY CHARACTERISTICS

Constantly requires attention of peers needs adult attention to concentrate only played with one friend and dependent on this friendship

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Needs to be more confident in front of others
COMMUNICATION	½	Talk more in detail to staff and peers
CARE	½	Needs to think about how he feels and describe feelings
CONCENTRATION	½	Concentrate for short periods on set activities
CREATIVITY	½	Use equipment more to develop imagination
CO-OPERATION	½	Needs to cooperate more with adults and peers

EMOTIONAL LITERACY

RECOGNISE FEELINGS	Not at all	CONFIDENT	Not at all
EXPRESS	Not at all	EMPATHY	Not at all

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	7	4	4	4	4	4	4
National Baseline	12	12	10	8	8	8	8
End of Baseline	12	12	11	8	8	12	10

80%	75%	70%	65%	60%	55%	50%	45%	40%

OBSERVATION NOTES

SET ONE Confident happy responsive Able to recall names of flower, Independent
SET TWO
SET THREE Confident in play
SET FOUR Able to set Physical challenges for himself
FINAL SET Good concentration adaptable able to ask and answer questions Responsible for the play of his group
ASSESSMENT LEARNING CHARACTERISTICS

Enthusiastic learner definite likes and dislikes but this does not affect his learning because he will show interest in other things with encouragement very sociable can be helpful to others and sometimes likes others to help him

META COGNITION

DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY

No adult intervention although adult in the area

Playing at being the teacher in this role asked and answered lots of questions adult could have extended this opportunity

Could have extended the use of Welsh in the play if opportunity arises

GROUP C CHILD 6

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	4X	4X	4X	CL/NL/PL
OBSERVATION STAFF		4X	3X	
OBSERVATION ONE				
OBSERVATION SET 1				
1 Inside Adult Led		1X	2X	PL
2 Inside Child Led	1X	1X		NL/CL
3 Outside Adult Led		2X		CL
4 Outside Child Led	1X	1X		CL/NL
OBSERVATION SET 2				
1 Inside Adult Led	1X	3X		CL
2 Inside Child Led		3X	2X	CL
3 Outside Adult Led		4X	3X	CL
4 Outside Child Led		3X	2X	CL
OBSERVATION SET 3				
1 Inside Adult Led		3X	1X	CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		4X	1X	CL
OBSERVATION SET 4				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		3X		CL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		2X		CL
OBSERVATION SET 5				
1 Inside Adult Led		1X	3X	PL
2 Inside Child Led			3X	PL

HOME LEARNING CHARACTERISTICS

Chooses and listens and joins in with story likes looking at pictures prefers to be read to Likes colouring, imaginary play uses symbols likes running around Seeks adult attention for reassurance

FAVOURITE PLAY

Dolls house colouring painting felt pens SETTING PLAY CHARACTERISTICS Very sociable imaginative likes playing with boys active running around more wary with adults wants to do things right mature knows right and wrong			
SOFT SKILL	1 ST	DESCRIPTION	
CONFIDENCE	3		Needs to push herself out of comfort zone
COMMUNICATION	3		Needs to add more detail when talking to staff on certain topics
CARE	3		Needs to discover more on how her and her friends actions and words can affect others
CONCENTRATION	3		Needs to distract friends less when they are still working
CREATIVITY	3		Needs to push herself more before asking friends
CO-OPERATION	3		Needs to try different groupings away from comfort of popularity of group she is in now

RECOGNITION	Most of the time	RECOGNITION	Most of the time
EXPRESSION	Most of the time	EXPRESSION	Most of the time

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	8	8	8	8	7	6	6
National Baseline	12	11	11	9	10	12	7
End of Baseline	12	12	12	11	10	12	10

STAGE	1	2	3	4	5	6	7	8

OBSERVATION NOTES

SET ONE Happy confident responsive
SET TWO Seeks adult attention purposefully ,independent, expressed enjoyment in her own work good recall
SET THREE
SET FOUR Able to stay interested in activity even when not her turn
FINAL SET Lots of talk and able to negotiate Able to use language to control and guide situation including both peers and small world play
ASSESSMENT LEARNING CHARACTERISTICS Very sociable .likes to be the centre of attention and comfortable with this informally with peer group. Less comfortable in formal situations. Enthusiastic wants to do well and likes to please. Independent good language likes helping others and sharing what to do
META COGNITION Uses language to organise thoughts Speaks aloud to remember things
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY Free play no adult intervention Encourage children to negotiate more with peers

GROUP D CHILD 1

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	3X	C/LP/L
OBSERVATION STAFF	1X	4X	3X	C/L
OBSERVATION ONE		2X	2X	C/LP/L
OBSERVATION SET 1				
1 Inside Adult Led		2X	2X	CL/PL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		4X		CL
4 Outside Child Led		2X	4X	PL
OBSERVATION SET 2				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	3X	PL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		3X	3X	CL/PL
OBSERVATION SET 3				
1 Inside Adult Led		4X		CL
2 Inside Child Led		2X	3X	PL
3 Outside Adult Led		4X	2X	CL
4 Outside Child Led				
OBSERVATION SET 4				
1 Inside Adult Led			5X	PL
2 Inside Child Led				
3 Outside Adult Led		1X	3X	PL
4 Outside Child Led				

HOME LEARNING CHARACTERISTICS

Wants To listen to story, will choose to listen to story, wants to join in with story, likes colouring. Uses symbols and imagination, enjoys boisterous active play

FAVOURITE PLAY

Messy play creative hands on play, loves story books, out and about talking to people.

SETTING PLAY CHARACTERISTICS

Likes table top activities, have a go at anything, knows what he wants to do not led by others. Plays with other children, interested and involved in whatever is going on

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Larger group confidence
COMMUNICATION	2	Lengthen periods of concentration
CARE	2	Develop independence at solving problems
PERSEVERANCE	1.5	Sharing
CREATIVITY	1.5	Responsibility for tidying
CO-OPERATION	2	Listening Skills

EMOTIONAL FILTERS

REQUESTING	Amount of time	1 ST FILTER	2 ND FILTER
EXPRESS	Amount of time	1 ST FILTER	2 ND FILTER

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	12	12	11	9	9	8	9
National Baseline	12	12	12	11	10	12	11
End of Baseline	12	12	12	12	11	12	11

24 Months	18-24m	25-36m	37-48m	49-60m	61-72m	73-84m	85-96m	97-108m
36m	18-24m	25-36m	37-48m	49-60m	61-72m	73-84m	85-96m	97-108m

OBSERVATION NOTES

SET ONE Responsive independent bold receptive to others and ideas

SET TWO Confident Seeks adult attention purposefully has ability to develop activities

SET THREE Confident and bold

FINAL SET Happy bold confident didn't always verbalise response to questions but acted as response

ASSESSMENT LEARNING CHARACTERISTICS

XXX can take charges has a good memory can explain what he has done makes educated guesses logical strives for perfection sometimes will not apply himself if he thinks he can't achieve this

META COGNITION

XXX knew learning was something to do with memory and understood to be effective this had to be not too long ago knew reading was important mentioned that he was a good learner because he and his friend learnt one another and that he was a good friend to him when he first started school

MEMORY, RECALL, FRIENDSHIP, RECENT, READING

DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY

Need to give more time and opportunity to ask questions and answer questions asked.

More use of praise

Choice within activity but not activity itself this may have impacted on the whole approach to the problem

Talk about learning skills as understood by children Adult as play partner

Would have benefited from adult as someone to talk to needed someone to intervene and scaffold his play Scaffolding

Follow up activity with recall session

Need to use What would happen if? More Follow children's interest even if set activity move learning and inquiry on from this start

GROUP D CHILD 2

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	3X	4X	4X	C/LP/L
OBSERVATION STAFF	3X	3X	2X	C/L
OBSERVATION ONE		3X	1X	C/L
OBSERVATION SET 1				
1 Inside Adult Led		2X	2X	CL\PL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X		CL

4 Outside Child Led		3X	1X	CL
OBSERVATION SET 2				
1 Inside Adult Led		3X		CL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		3X	1X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 3				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	4X	PL
3 Outside Adult Led		4X		CL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 4				
1 Inside Adult Led			4X	PL
2 Inside Child Led				
3 Outside Adult Led			3X	PL
4 Outside Child Led			4X	PL

HOME LEARNING CHARACTERISTICS

Choose to listen to story, likes looking at pictures, wants to be read to. Likes colouring, using construction, imaginary play. Likes boisterous active play

FAVOURITE PLAY

Dolls, pram and make up

SETTING PLAY CHARACTERISTICS

Likes prams playing with girls etc active imaginative play over sitting table top. Independent does her own thing not led by the group, although does understand about being in a group and playing her part

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Build confidence in larger groups
COMMUNICATION	1	Concentrate lengthening periods
CARE	1	Rely less on adult help
PERSEVERANCE	1	Cooperate even with special resources
CREATIVITY	1	Care of resources finished with
CO-OPERATION	1	Improve clarity and detail

EMOTIONAL literacy

Reflections	Part of the time	Reflections	Part of the time
Expression	Part of the time	Expression	Part of the time

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	11	10	9	8	8	6	6
National Baseline	12	12	10	9	9	11	8

End of Baseline	12	12	12	12	11	11	10
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5.0-5.5	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
5.0-5.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5	3.5-4.0	4.0-4.5	4.5-5.0	5.0-5.5

OBSERVATION NOTES

SET ONE Independent interested in what is going on good interaction

SET TWO Seeks adult attention purposefully

SET THREE Able to play independently and as member of a group

FINAL SET Was able to join in and help with ideas of another child therefore did show some adaptability. Good engagement with physical action side of project. Showed good problem solving abilities used past experience

ASSESSMENT LEARNING CHARACTERISTICS

Is inquisitive sociable a good group member learning is gender orientated needs to develop recall and become more adaptable in her play

META COGNITION

Writing her own name Reading

Writing, Reading, Practice Helps

DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY

Need to give more time and opportunity to ask questions and answer questions asked

More use of praise

Choice within activity but not activity itself this impacts on whole approach to task

Talk more to children about their learning

GROUP D CHILD 4

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	5X	4X	5X	NLP/L
OBSERVATION STAFF	4X		3X	N/L
OBSERVATION ONE	2X		1X	N/L
OBSERVATION SET 1				
1 Inside Adult Led		1X		CL
2 Inside Child Led		2X		CL
3 Outside Adult Led		2X	3X	PL
4 Outside Child Led		4X		CL
OBSERVATION SET 2				
1 Inside Adult Led		3X		CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		2X	2X	CL/PL
OBSERVATION SET 3				
1 Inside Adult Led		5X	2X	CL
2 Inside Child Led		4X		CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		3X	1X	CL

OBSERVATION SET 4				
1 Inside Adult Led		2X		CL
2 Inside Child Led				
3 Outside Adult Led		2X	4X	PL
4 Outside Child Led		1X	1X	CL/PL

HOME LEARNING CHARACTERISTICS

Likes looking at pictures, imaginary play uses symbols and imagination enjoys boisterous active play

FAVOURITE PLAY

Playing cars running around with brothers likes singing

SETTING PLAY CHARACTERISTICS

Likes looking and observing play then joins in likes adult company likes computer and veranda interested in all that is going on

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	0.5	Adapt to changes in the day
COMMUNICATION	1	Extend time on self chosen tasks
CARE	1	Persevere with problem even if adult still around
PERSEVERANCE	1	Cooperate with adults with less encouragement
CREATIVITY	1	Look after resources when finished with them
CO-OPERATION	1	Talk to adults with less encouragement

EMOTIONAL LITERACY

RECOGNITION	Part of the time	CONTROL	Not at all
EXPRESS	Most of the time	EMPATHY	Unable to say

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	6	7	6	8	6	6	8
National Baseline	12	12	10	9	6	11	10
End of Baseline	12	12	12	11	9	12	10

S.O.G.S.	LS	MS	VS	HLS	SLS	IS	SCS	CS
37m	13/30m	22/36m	19/48m	14/30m	15/30m	20/36m	17/36m	19/24m

OBSERVATION NOTES

SET ONE Responsive to things going on around him can sometimes seem uninterested

SET TWO Seeks adult attention purposefully More confident, bold in the outdoors

SET THREE Lots of energy loves running around not focussing though

FINAL SET Not really engaged with activity but was very willing to cooperate and cut sellotape happy to go along with another child's ideas

ASSESSMENT LEARNING CHARACTERISTICS

Very sociable learner is interested in learning Can ask and answer questions only when he is enjoying topic Adaptable as to where he plays will join in with anything Does not always play appropriately

META COGNITION

Thinks it is easy to learn
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY
Children given the opportunity to recall facts of the story and they did this well
Need to use more praise
Comment on group or pair dynamics as a learning tool
Exploring not able to verbalise adult could have done this for him Adult supplies language

GROUP D CHILD 5

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	1X	2X	2X	C/LP/L
OBSERVATION STAFF	3X	1X		N/L
OBSERVATION ONE	2X	1X	1X	N/L
OBSERVATION SET 1				
1 Inside Adult Led		1X	1X	CL/PL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		1X	2X	PL
OBSERVATION SET 2				
1 Inside Adult Led		2X		CL
2 Inside Child Led		2X	2X	CL/PL
3 Outside Adult Led		3X	2X	CL
4 Outside Child Led		1X		CL
OBSERVATION SET 3				
1 Inside Adult Led		1X	1X	CL/PL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		2X		CL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 4				
1 Inside Adult Led			3X	PL
2 Inside Child Led				
3 Outside Adult Led		1X	4X	PL
4 Outside Child Led			1X	PL

HOME LEARNING CHARACTERISTICS

Enjoys listening to story, will choose to listen likes looking at pictures. Likes colouring imaginary play prams. Uses symbols and imagination. Enjoys boisterous active play

FAVOURITE PLAY

Prams and dolls

SETTING PLAY CHARACTERISTICS

Needs adult company to join in likes house dolls etc. needs reassurance independence is developing

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Rely on adults less
COMMUNICATION	1	Longer periods of time
CARE	1	Rely less on adults

PERSEVERANCE	1		Worry less about new things cooperates with less encouragement
CREATIVITY	1		Look after resources when finished with them
CO-OPERATION	1		Converse with others more during activities

EMOTIONAL LITERACY

EMOTIONAL LITERACY	Part of the time	1-5	Part of the time
EMOTIONAL LITERACY	Part of the time	1-5	Part of the time

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	7	8	6	6	8	6	6
National Baseline	12	12	10	9	9	9	10
End of Baseline	12	12	12	12	11	12	10

24 MONTHS	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5
24 MONTHS	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5

OBSERVATION NOTES

SET ONE Confident responsive to peers Quiet but good self esteem
SET TWO Independent quiet in the classroom bolder outside
SET THREE Focussed with activity and played quietly and calmly
FINAL SET Did XXX intuitively choose box to keep bird in once this had been chosen problem solving part of activity almost solved itself
LEARNING CHARACTERISTICS Learning gender orientated likes company and learns from peers often the one to lead in her group very good fine motor skills not very adaptable outside these situations doesn't always think her way out of a problem
META COGNITION Thought learning was hard Intuition
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY Comment on paired/group dynamics More praise Choice of activity and within activity not always paramount XXX was on her own bathing baby therefore no use of language, cooperation and full process missing Needed to play with someone adult? Need recall

GROUP D CHILD 6

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	5X	P/L
OBSERVATION STAFF	2X	3X	2X	C/L
OBSERVATION ONE	2X	1X	1X	C/L
OBSERVATION SET 1				
1 Inside Adult Led	1X	1X	1X	NL/CL/PL

2 Inside Child Led	1X	1X		NL/CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		3X		CL
OBSERVATION SET 2				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		3X	1X	CL
3 Outside Adult Led		3X	2X	CL
4 Outside Child Led		1X		CL
OBSERVATION SET 3				
1 Inside Adult Led		1X	1X	CL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		3X	3X	CL/PL
4 Outside Child Led		3X		CL

HOME LEARNING CHARACTERISTICS

Chooses to listen to story likes looking at pictures wants to join in with story
Likes colouring imaginary play. Uses symbols and imagination likes boisterous play

FAVOURITE PLAY

Dolls and prams

SETTING PLAY CHARACTERISTICS

Beginning to listen to instruction, not really involved or applied to tasks plays with anything and everything for short periods of time looks out for brother

Schema lining up

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Ask for help
COMMUNICATION	1	Longer periods on self chosen tasks
CARE	1	Persevere with activity
PERSEVERANCE	1	Cooperate with adults with less encouragement
CREATIVITY	1	Take more care with resources
CO-OPERATION	1	Talk in more detail

EMOTIONAL LITERACY

RECOGNITION	Part of my team	COGNITION	7 months before
EXPRESSION	1 month before	EMOTION	7 months before

Baselines	P & S	Oracy A	Oracy B	Reading	Writing	ML & SS	Number
2 week baseline	8	4	5	6	6	4	4
National Baseline	11	9	9	9	9	7	6
End of Baseline	12	11	10	8	9	8	5

S.O.G.S.	LS	MS	VS	HLS	SLS	IS	SCS	CS
37m	12/24m	15/24m	13/18m	11/18m	13/24m	16/24m	16/36m	14/18m

OBSERVATION NOTES

SET ONE Happy responsive confident did persevere using hopper until accomplished this
SET TWO Seeks adult attention purposefully Can be independent Bold will hold onto things if others try and take them
SET THREE Willing to move away from adult to pursue own interests Able to respond appropriately to negative feedback from another child didn't become aggressive
SET FOUR Appeared tired often yawning
ASSESSMENT LEARNING CHARACTERISTICS Play gender orientated learning limited poor interaction Needs 1:1 support Engaged in learning about 15% of time Physical and Gross motor appropriate development
META COGNITION
DEVELOPMENT OF TEACHING/LEARNING DISPOSITION ACTIVITY needs 1:1 to benefit from activities

GROUP E 1

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	2X	3X	3X	CL/PL
OBSERVATION STAFF		4X	1X	CL
OBSERVATION ONE				
OBSERVATION SET 1				
1 Inside Adult Led	1X	1X		NL/CL
2 Inside Child Led		3X		CL
3 Outside Adult Led		1X	1X	CL/PL
4 Outside Child Led		1X		CL
OBSERVATION SET 2				
1 Inside Adult Led		5X		CL
2 Inside Child Led		3X	2X	CL
3 Outside Adult Led				
4 Outside Child Led				
OBSERVATION SET 3				
1 Inside Adult Led		3X		CL
2 Inside Child Led		3X		CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		3X		CL
OBSERVATION SET 4				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		3X		CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		2X		CL
OBSERVATION SET 5				
1 Inside Adult Led		4X	2X	CL
2 Inside Child Led		3X	1X	CL

3 Outside Adult Led		1X	3X	PL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 6				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		1X	2X	PL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		3X	1X	CL

HOME LEARNING CHARACTERISTICS

Chooses and enjoys listening to story likes looking at pictures joins in with story Likes imaginary play cars and garage uses symbols enjoys boisterous active play

FAVOURITE PLAY

Football

SETTING PLAY CHARACTERISTICS

Likes new things gets very involved good all rounder likes books and story

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Needs to develop confidence to try unfamiliar things
COMMUNICATION	3	Needs to talk in front of class more formal situations
CARE	1	Needs to develop this empathy
CONCENTRATION	1	Needs to concentrate for longer periods keep chat to later
CREATIVITY	2	Needs to think more for himself not rely on others
CO-OPERATION	2	Needs to adapt more in groups and extend friendships

EMOTIONAL LITERACY

RECOGNITION	Part of the time	CONFIDENT	Not at all
EXPRESS	Part of the time	EMPATHY	Part of the time

	P&S	OA	OB	R	W	N	MLSS
First assessment	12	11	10	8	8	5	4
Baseline	12	12	10	8	8	6	9

SUBJECT	TS	MS	SS	HS	AS	IN	SES	ES

OBSERVATION NOTES

SET ONE Can be either involved or distracted Seeks adult attention when he wants it

SET TWO

SET THREE Confident happy to play on his own

SET FOUR Interacts well but happy to play on his own

FINAL SET Bold, confident little boy

GROUP E CHILD 2

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	3X	5X	1X	CL
OBSERVATION STAFF		4X	1X	CL

OBSERVATION ONE				
OBSERVATION SET 1				
1 Inside Adult Led				
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		4X	2X	CL
4 Outside Child Led		2X	1X	CL
OBSERVATION SET 2				
1 Inside Adult Led		4X		CL
2 Inside Child Led		3X		CL
3 Outside Adult Led				
4 Outside Child Led		3X		CL
OBSERVATION SET 3				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		2X	1X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		2X		CL
OBSERVATION SET 5				
1 Inside Adult Led		3X	3X	CL/PL
2 Inside Child Led		4X	1X	CL
3 Outside Adult Led		4X	2X	CL
4 Outside Child Led		4X		CL
OBSERVATION SET 6				
1 Inside Adult Led		2X	3X	PL
2 Inside Child Led		2X	2X	CL/PL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		3X	3X	CL/PL

HOME LEARNING CHARACTERISTICS

Chooses and enjoys listening to story likes looking at pictures prefers to be read to

Likes construction

Enjoys active boisterous play

FAVOURITE PLAY

Climbing and building a tower

SETTING PLAY CHARACTERISTICS

Social happy loves to interact good imagination sits and enjoys activities

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	2	Improve confidence in variety of situations
COMMUNICATION	2	Talk in groups he feels less comfortable with
CARE	2	Tidy resources with less encouragement
CONCENTRATION	2	Longer periods on topics of interest
CREATIVITY	2	Stick to problem for longer
CO-OPERATION	2	Cooperate more with children he plays with

EMOTIONAL LITERACY

REFLECTION	Parent/Child time	Confident	Time of the time
EXPRESS	Parent/Child time	Confident	Time of the time

	P&S	OA	OB	R	W	N	MLSS
First assessment	8	8	8	7	4	4	4
Baseline	12	12	10	8	8	7	12
Final assessment							

STUDY	IS	MS	CS	HS	SS	IS	MS	IS

OBSERVATION NOTES

SET ONE William bold robust little boy independent and confident

SET THREE Confident and independent

SET FOUR Happy Healthy Robust and confident in environment

GROUP E CHILD 3

24 MONTHS	NL	CL	PL	CATEGORY
OBSERVATION HOME	3X	3X	2X	NL/CL
OBSERVATION STAFF	1X	3X	1X	CL
OBSERVATION ONE				
OBSERVATION SET 1				
1 Inside Adult Led	1X	3X		CL
2 Inside Child Led	1X	2X		CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		3X	1X	CL
OBSERVATION SET 2				
1 Inside Adult Led		4X		CL
2 Inside Child Led		1X	3X	PL
3 Outside Adult Led				
4 Outside Child Led		4X		CL
OBSERVATION SET 3				
1 Inside Adult Led	1X	2X		CL
2 Inside Child Led	1X	1X		NL/CL
3 Outside Adult Led		3X		CL
4 Outside Child Led		4X		CL
OBSERVATION SET 4				
1 Inside Adult Led		2X	1X	CL
2 Inside Child Led		3X	2X	CL
3 Outside Adult Led		2X	1X	CL
4 Outside Child Led		3X	1X	CL

HOME LEARNING CHARACTERISTICS

Chooses and enjoys listening to story wants to join in with story likes to be read to

Uses symbols and imagination Likes active boisterous play

FAVOURITE PLAY

Imaginary play doll and pram,

SETTING PLAY CHARACTERISTICS

Flits from one activity to another loves routine

SOFT SKILL	1 ST	DESCRIPTION
CONFIDENCE	1	Follow rules rely on adult support less
COMMUNICATION	1	Needs to chat with less encouragement
CARE	1	Needs to demonstrate caring nature to friends
CONCENTRATION	1	Needs to concentrate for longer periods less distracted
CREATIVITY	1	Needs to have a go even if fail first time
CO-OPERATION	1	Needs to rely less on encouragement of adults

PLAYTIME	10:00-11:00	11:00-12:00	12:00-1:00
1. VIBRANT	10:00-11:00	11:00-12:00	12:00-1:00

	P&S	OA	OB	R	W	N	MLSS
First assessment	8	5	8	7	6	4	4

Subject	1	2	3	4	5	6	7	8

OBSERVATION NOTES

SET ONE Bold independent happy and healthy Seeks adult attention when he wants it

SET TWO Likes the company of others and the social exchange

SET THREE Healthy and robust constantly needed adult nearby but still appeared to be confident

SET FOUR Not yet settled fully into school environment

FINAL SET really not well today pale and very tired has been ill

APPENDIX 10 LEARNING CATEGORIES FOR ALL CHILDREN IN THE RESEARCH GROUP

Child/ Group	Age in months	Learning category	Comments on journey
1A	24 30 36 42 48 54	NL/CL CL CL CL CL CL	There are elements of the NL in all categories. They reduce and by the age of 48/ 54 months have become 1 score. Alongside this the number of PL's has increased
5A	24 30 36 42 48 54	NL CL CL CL CL CL	NL only appears at 24 months and as elements of the NL decreases the CL increases by 48/54 months the PL category has increased
6A	24 30 36 42 48 54	NL CL CL CL CL PL	NL 24 months no NL categories after 36 months consistent PL by 54 months
1B	24 30 36 42 48	CL CL CL CL CL	No NL characteristics consistent in the CL category throughout observations with increasing PL characteristics
4B	24 30 36 42 48	NL CL CL CL CL	Inconsistent results child moves from NL to CL stays mainly in the CL category on occasions some PL characteristics
5B	24 30 36 42 48	CL CL CL CL PL	No NL characteristics and stays strongly within CL category up to 42 months. PL category at 48 months
6B	24 30 36 42 48	CL CL CL CL CL	No NL characteristics after 30 months gradual increase to consistent CL. Less direct impact on the PL.
1C	24 30 36 42 48	CL CL CL CL NL/CL	No NL characteristics after 30 month observation. Gradual increase to consistent CL Last observations indicate requirement for adult guidance
2C	24 30 36 42 48	CL CL CL CL PL	No NL characteristics in any observation sets and increase in PL characteristics
3C	24 30 36 42 48	CL CL/PL CL CL PL	No NL characteristics after 30 months consistent CL increase to PL final observation
4C	24 30 36 42 48	CL CL CL CL/PL PL	Consistent CL/PL last observation mainly all PL characteristics
5C	24 30 36 42 48	CL CL CL CL PL	Some NL characteristics up to 36 months although overall consistent CL leading to PL by final observation
6C	24 30 36 42 48	CL CL CL CL PL	No NL characteristics after 30 months consistent CL PL characteristics appear at 42 months
1D	24 30 36 42	CL CL/PL CL PL	PL characteristics at 24 months consistently in the CL/PL category final observation PL category
2D	24 30 36 42	CL CL CL PL	PL characteristics at 24 months no NL characteristics consistently in the CL/PL category final observation PL category
4D	24 30 36 42	CL CL CL PL	PL characteristics at 24 months no NL characteristics consistently in the CL/PL category final observation PL category
5D	24 30 36 42	CL CL CL PL	PL characteristics at 24 months no NL characteristics consistently in the CL/PL category final observation PL category

6D	24 30 36	CI CL CL	NL characteristics at 24 months stayed consistently throughout observations a CL some PL characteristics at final observation
1E	24 30 36 42 48 54	CL CL CL CL CL CL	There is no NLcategory after the 24 month observations. The PL category increases after 42 months with one PL category in each of the four learning situations by 54 months
2E	24 30 36 42 48	CL CL CL CL CL/PL	No NL characteristics some PL characteristics throughout all observations moving towards the PL category
3E	24 30 36 42	CI CL CL CL	Some NL characteristics up to 36 months PL characteristics in final observation

APPENDIX 11 CHILDREN'S PLAY CHARACTERISTICS AND SUMMARY

Children's play characteristics at 24 Months the question marks indicate area where there is no clear indication yet of a child's characteristics.

Identification Group A	Home	Setting	Observation 1
Child 1 Play Likes Symbols Active Favourite	Imaginary, colouring ✓ ✓ Cars	Plays alongside Confident Good language ✓ ?	Social play ✓ ✓ ✓ Construction, doctor
Child 2 Play Likes Symbols Active Favourite	Imaginary x ✓ Outside, messy, cars	Parallel play Shy Good language ✓ ?	✓ ✓ ✓ ✓ Outside
Child 3 Play Likes Symbols Active Favourite	Imaginary ✓ ✓ Cars, hiding	Parallel play ✓ ?	✓ ✓ ✓ ✓ ?
Child 4 Play Likes Symbols Active Favourite	Construction x ✓ Cars, driving	Social play Messy play ? ✓ Outside	Social play helping ✓ ✓ Outside, car
Child 5 Play Likes Symbols Active Favourite	Colouring, imaginary x ✓ Cars, darts, phone	Parallel play Outdoors ? ✓ ✓	✓ Prams, dolls ? ✓ ✓
Child 6 Play Likes Symbols Active Favourite	Construction imaginary x ✓ Dolls	Parallel play Imaginary ✓ ✓ ✓	✓ ✓ Imaginary ✓ ✓

Identification Group B	Home	Setting	Observation 1
Child 1 Play Likes Symbols Active Favourite	Construction imaginary ✓ ✓ Cars	Parallel ? ? ✓	✓ Vehicles imaginary ✓ ✓ ✓
Child 2 Play Likes Symbols Active Favourite	Colouring, construction ✓ ✓ Trucks cars	Parallel Outdoor ? ✓ Outdoor	✓ Imaginary ? ✓ Outdoor cars

Child 3 Play Likes Symbols Active Favourite	Colouring, company ✓ ✓ Jigsaws, reading blocks	Parallel Helping other adults ✓ Group activity	Not observed
Child 4 Play Likes Symbols Active Favourite	Colouring, construction ✓ ✓ Everything interaction	Parallel Story, singing, painting ? ✓ Home corner play	✓ Animals, vehicles ? ? Preferred indoors
Child 5 Play Likes Symbols Active Favourite	Colouring, construction ✓ ✓ Drawing	Sociable Fine motor table top ✓ ? Home corner play	? Table top activities ? ? Home corner play
Child 6 Play Likes Symbols Active Favourite	Colouring construction ✓ Cars lining things up	Solitary Adult interaction ? ✓ ?	Parallel ✓ ? ✓ Story running

Identification Group C	Home	Setting	Observation 1
Child 1 Play Likes Symbols Active Favourite	Colouring ✓ ✓ Books messy outdoor	Social Everything ✓ ✓ Anything going on	✓ ✓ ✓ ✓ ✓
Child 2 Play Likes Symbols Active Favourite	Colouring construction ✓ Imaginary	Independent and social House play ✓ ✓	Social ? ? ✓
Child 3 Play Likes Symbols Active Favourite	Colouring, imaginary ✓ House play	Parallel Water ? ? ✓	Solitary ? ? ? ?
Child 4 Play Likes Symbols Active Favourite	Imaginary ✓ ✓ Cars running around	Parallel Computer ? ✓ Water sand play	Solitary ? ? ? ?
Child 5 Play Likes Symbols	Colouring imaginary ✓	Dependent Adult company ?	Solitary ✓ ?

Active Favourite	✓ Prams and dolls	? ✓	? ✓
Child 6 Play Likes Symbols Active Favourite	Colouring imaginary ✓ ✓ Dolls and pram	Parallel Anything ? ? ?	✓ ? ? ? ?

Summary of Results

Likes	10 children liked imaginary play. This play reinforced the gender role of the children involved, the girls enjoying house play and the boys' vehicle play. Construction and colouring covered most of the rest of the play either of these could of course have included imaginary play.
Favourite	The favourite play was roll play. It was gender biased towards house play and cars.
Active	All 18 children enjoyed active play. This may indicate and reaffirm the assumption that active and experiential learning is a natural process through which children learn.
Symbol	11 children were using symbols in their play and this type of play was more frequent amongst the older children. This coincides with Piaget's stages of development.

APPENDIX 12 PHOTOGRAPH OF LEARNING DISPLAY



APPENDIX 13 EXTRACT ESTYN REPORT 2008

11. Ynyscynon Nursery School is a good school with many outstanding features. Overall, the education provided by the school meets the needs of the range and ability of children on roll and the school contributes very effectively to the well-being of all in its care. It combines high quality support with a wide range of stimulating learning experiences to ensure that children are well prepared to meet the challenges of the next stage of their learning.
12. Outstanding features include the high quality care, support and guidance provided by the school, the standard of children's personal and social skills and the extensive provision for outdoor education.

These figures compare well with the Welsh Assembly Government targets for 2010 that 98 per cent of lessons should be grade 3 or better; and compare favourably with those in the latest report by Her Majesty's Chief Inspector where the standards were grade 1 or 2 in 80 per cent of lessons observed. Overall standards have improved since the previous inspection.

16. Children make good progress in developing the key skills of reading, writing, numeracy and those skills linked to information and communications technology (ICT). They make outstanding progress in their listening and personal and social skills. They make exceptional progress in developing their bilingual skills and have an outstanding understanding of Welsh. Children use their creative skills well to enhance their work; their problem-solving and decision-making skills are outstanding.
17. They also consistently develop their "soft skills" (confidence, concentration, creativity, co-operation, care and non-verbal communication). This is an innovative feature of the provision and has a very positive impact on the children's learning.
18. According to early assessments, children enter the school with a below average level of achievement. However, local comparative data indicates that by the time baseline assessment is taken early in the autumn term, the school compares very well and has results that place it in the upper quartile for similar schools within the LA and the Four Counties (Rhondda Cynon Taff, Caerphilly, Merthyr and Bridgend). This reflects the fact that some children spend nearly a year in the nursery prior to this baseline assessment, as well as the very good value added by the school on an individual level. Rolling averages over the past five years suggest that these levels have steadily improved. There is no gender issue as girls and boys achieve equally well throughout their time at Ynyscynon Nursery.

APPENDIX 14 STAFF INTERVIEW MAY 2011

What do you understand my research has been about?

You have been trying to find out how children learn whether they are involved in an adult or child led activity. Do children change what type of learner they are novice, capable or practised learners. What can we do to encourage children to develop from the novice to the practised learner.

How have you found the process involved?

Enjoyed it has opened my eyes made me look at how children learn in different ways. Do children know why they can do things and I think more about their general play. If we are not involved in their play we need be more aware of what they need in the environment to help them play.

Have you learnt anything about your own learning during the research?

I have not learnt anything about my own learning because I know what helps me learn. But it has made me aware of how others learn and that this might be different to the way that I learn and as a teacher I should not impose my way of learning on the children because it may not suit everyone.

Do you have any strong opinions/feelings about this topic?

Everyone should become more involved in finding out about these things and not make assumptions about children we may not know as much as we think we know about their learning

Have you learnt anything from this study for yourself?

I have learnt to think more deeply about what we are providing for the children we may think they are going down one path and they may chose a different path altogether

Have you made any changes to your practice as a result of this study?

Yes

Thinking more about children's learning in the continuous and enhanced provisions in the classroom

I now talk to the children about their learning and talk to them about how I learn

I am very involved in the children working with the children and developing their role as peer assessors

Do you see any way that the study could continue to progress?

We need to continue to constantly observe the children and their learning. To make more use of the learning categories in our children's profiles

We need to think about how we can use this with parents

This work needs to be disseminated to all staff so that we all become more aware and think more about learning.

Do you foresee any further changes that might happen as a result of the research?

Use the learning categories in our profiles

Become more aware of the categories and how we could move children on

Use the observations in play week to observe areas and see how the accommodate children and different types of learners

Different observations help you see children differently

Use the information when reporting to parents and in the children's reports

Be able to use the observations as constructive criticism and a way of reflecting on practice.

Not all staff will be able to cope with this

THE PROFESSIONAL DEVELOPMENT PORTFOLIO

PDP1:1 REFLECTIONS ON PROFESSIONAL DEVELOPMENT

One of the first tasks suggested for my Professional Development Portfolio was to review and reflect on my personal and professional status. This process helped to clarify my initial thoughts on a possible research topic. This process of reflection continued informally throughout the research and more formally at the beginning, middle and end. Reflection on the research process and developing reflexive practice in my professional context became, by the end of the research, a significant change area in the study. It was the reflective process that had the most affect on staff and children. This helped to ensure that the children at the Centre were developing and learning in as conducive to learning as possible.

Researching young children's learning is a complex and particularly fascinating area. All my professional life I have worked with very young children. At first this was by chance and then by design. My research questions were directly related to my role as early years professional and therefore my work directly impacted on my own practice and that of my setting. One of my motivations for embarking on this study was to develop my identity as a researcher and a thinker about children's learning in the early years.

When I began this study I reflected and analysed my own stage of development both personally, professionally and as a researcher. I believed my time management skills, my determination and my ability to break down tasks into manageable activities would provide me with a sound basis I would need to complete the task ahead. My previous early years knowledge and experience would provide invaluable support throughout the study. However, I acknowledged that although I had completed a research study at Masters Level, I lacked certain research skills and the experience necessary to research at doctorate level. My ability to produce quality academic writing at this level I felt was untested. I had little knowledge and experience of the research tools that would help me

analyse my data. This initial audit of my research skills revealed a need for training and a requirement to become familiar with research terminology and practice and in particular referencing skills and protocols.

One of the first difficulties I encountered was to focus my area of study into something that was both worthwhile and manageable. This proved to take weeks and was a knotty problem and an ongoing experience for me for quite a while. Initially, I had not been aware of this as a potential problem. It was due largely to the experience and support of my mentors that I was able to overcome this issue. There were many other difficulties that arose during the research: they were not necessarily easier to overcome but they were foreseeable.

Developing the pro-forms involved in the interviews and the CLDOT was a very important process in the research methodology. In fact, the child learning disposition observation tool became the means through which many thoughts and ideas were clarified and later refined, as evidenced in the redrafting process for these forms. The development of the forms was an effective way for staff to become involved in the research process. They often provided the stimulus for training, reflection and professional discussion. They helped us to understand how child observations could become a powerful tool in the reflective process. The design and content of the forms became an objective means through which the professionals involved could talk critically and acknowledge the need for change and improvement to practice. This helped the discussions to be neutral, to focus on learning and identify how we needed to change to improve practice. This process slowly became part of the culture at the Centre

I particularly identify with Fullan's (1991) proposal that education, by its very nature, is concerned with the change of the individual: and that action research in the educational sector is about change. Education is concerned with allowing young people to take a risk and to step into the unknown. This again parallels my research. It is a step into the unknown and certainly I feel a risk for me personally and as a researcher. Teaching is

based on the relationship between the teacher and the child. This relationship is subject to constant internal change as well as imposed external change.

Reflective practice and the development of reflective practitioners are important aims for any organisation as well as being a central component in the process of action research. Action Research is a process that needs reflection to move forward and it should therefore be a useful tool for organisations to ensure future development and improvement.

I did not at this stage appreciate how significant the theory and research on reflective practitioners and reflexive practice would become to my research. I had thought that at the Centre we had always been effective reflective practitioners. It is through this research, however, that I have realised the need for us to travel further in this direction. We often, as a staff, had reflective discussions resulting from class observations or review of documentation. They had tended however to focus on the activity and the child and not on the contribution of staff. McInnes *et al.*, (2011, p. 122) exemplify this and say,

However, it has been argued that direct engagement with pedagogy is lacking in early years education (Moyle et al., 2001; Stephen 2010b) as, when examining their practice, practitioners tend to focus on children's behaviour rather than analysing their own.

Fullan (1991) gave me a new insight into the concept of the reflective practitioner. I always thought that the reflective practitioner was a positive role model. However, if we enforce this cycle of reflection and change without consideration of and empathy towards practitioners then it can infer to them and others that that there is something wrong that has to be rectified? During this research I had to come to terms with the tension that exists between accepting the need for change whilst maintaining staff moral and a positive self-image. It was very important that I managed this tension successfully.

It is difficult to accept that the subject of this study will always be a work in progress. I will continually find new information or knowledge that influences my understanding of

the research area. Research requires analytical thought and attention to detail resulting from continually checking and re thinking ideas. I have learnt to review my work using a variety of perspectives and most importantly the more public the work becomes the more diverse the insights. This process will be ongoing and by the end of the research programme I will have reconciled this with the end product of the final dissertation.

I have made some significant advancement as my study has progressed. Many of these have directly affected my aims, priorities and concerns identified at the beginning of this personal and professional journey. My first presentation and assignment on 'Contextualising Change' ensured that I began the process of identifying in detail my area of study and establishing the connection between my research and place of work. I was aware of the areas of weakness confirmed in the assignment's feedback. However, it also gave me the confidence to believe that with effort I could realise my ambitions. Finalising my research questions was something that would not happen for a number of months and an important part of this process was the meetings with my supervisors. At these meetings, gradually the research questions became realistic and manageable.

My research and ethics proposals to the university committees further shaped the development of my analysis and academic writing skills. The process of describing my research area concisely for the proposal ensured that I could express my thoughts factually and succinctly: something that at first I found difficult but knew was going to be necessary to the success of my project.

- The first time I became aware that in the process of completing the EdD I would have to publicise and promote my work through writing and presentation was at Research Training held at UWIC in May 2008. Making presentations to an unfamiliar audience involved me in developing a whole new set of skills. I am naturally a good communicator in a 1:1 situation but I needed to learn how to adapt these skills to gain the attention and interest of a bigger audience. I have done this in my professional role at various times at the Centre but these have always been on topics that I know well and am comfortable with. They are not usually scrutinised in the same way the presentations on

my research were. I have found this part of the research particularly challenging but also enjoyable. I do not feel the apprehension will ever go away. However, I am beginning to understand how it can help an individual gain new insights and confidence in their work.

My first attempt at a presentation was to successfully submit to the BERA Student Conference for September 2009. This was an important achievement for me. It was a twofold learning experience it helped to boost my confidence and I began to appreciate the transient nature of my work. What can seem like a final product turns out to be continuously changing and progressing. The questions posed at the actual presentation helped to move forward my thinking on my research. My second proposal for the main conference failed and I was disturbed by some of the feedback that suggested that my research was 'taking away children's voice' from their learning. This was something that I thought I was actually developing and supporting. This taught me that in being concise you must also be sure that your ethos and principles are clear and not lost in your research writing.

I found my literature review seminar to be at first an uneasy experience that later developed into a rewarding one. This was the first time I appreciated that I might have something worthwhile to contribute to the body of knowledge that exists on young children's learning. Again, I learnt from the questions asked, how my work was being seen through the eyes of other people. This is something that is very difficult to do on your own. This process has taught me something new about myself, that is I am not always good at enthusiastically explaining my work to others. Sometimes I am too focussed on my own ideas and neglect to value the contribution that others can make. I would like to improve on this in the future.

The half way stage in my research proved to be an illuminating experience, a time to reflect on my thoughts, hopes and the aims with which I had begun this study. Perhaps the most interesting aspect has been to reflect on myself, as a researcher, and how this research has impacted on my understanding and appreciation of my own professional

development. This reflection has enabled me to see that my personal and professional lives are in intrinsically linked.

Overall this research process has been a steep learning curve for me and as an illustration, there is one experience that I would like to discuss in depth:- the presentation of my research and literature review to all the staff at the Centre that I manage. I did this presentation almost exactly half way through my research and in some ways it was more difficult than the literature review seminar at the university. This would be the point at which the potential to affect practice at the Centre, and the future involvement of the staff would be realised. A successful presentation was vital to the continuation and success of the research.

The main aims of the presentation were to:-

- raise awareness amongst staff of my research
- inform staff who had already participated in my study of my progress
- encourage staff to criticise and contribute to the CLDOT
- encourage staff to become familiar with the observation tool
- complete one of their own observations using the CLDOT
- think about and establish a way forward for the use of the tool at the Centre as a means of improving pedagogy

One of the main difficulties was to summarise the work, whilst still being able to express and discuss the complexities of the subject.

Presenting to staff at the Centre had difficulties. Staff have a variety of early years backgrounds and qualifications; some staff were more aware than others of the research project: some staff had already been involved in early interviews and discussions about the CLDOT. Also presenting to people you know well and work with has its own inherent difficulties: During the preparation for this presentation I realised that in the first part of the session I would need to tell staff what my research questions were, what I had learned from my literature review and its connection to the research. This was very

much going to be a 'me talking session'. I felt this was necessary to give staff the background they would need to participate and contribute fully later in the session.

I began to plan strategies for how I was going to nurture the enthusiasm of the staff for this work. These strategies called for a democratic approach to the presentation. I did this by asking staff to study the CLDOT and propose individually or in small groups any amendments they could identify to make the tool easier to complete and more focussed. This engendered a lot of discussion and gave staff the opportunity to express their opinions to colleagues and myself. I shared with them my thoughts after I had completed a number of observations. I then gave staff the opportunity to complete an observation using a video clip of the children at play. This process successfully engaged them with the tool because they could see and experience how the tool could enhance and focus our observations directly on the learning of the children. I felt the staff particularly enjoyed this session.

The more difficult problem was to identify how this could be taken forward in a practical sense to improve pedagogy. If the improvements were to be successful, staff would have to enable the children to understand more about their learning and to more effectively develop the skills necessary to become successful learners. This, I thought, required a different approach from me as a presenter. I believed I now needed to give staff suggestions and information about some of the strategies that could be used to achieve this. We discussed these and decided what if any might work for us. This discussion was fruitful and a way forward was planned. Details of these suggestions are made clear in the methodology chapter.

The teachers at the Centre originally piloted the planned way forward. Further analysis and review of the methods used would result in growing confidence in the effectiveness of the process. The teaching staff would be able to reflect on this experience and disseminate to the rest of the Centre staff. This reflection and the connection to changing practice is an important action research cycle. Reflective practitioners resulting in reflexive practice would provide evidence for the success of this research. The process of

observing children and analysing the data was not only a means of recording children's learning through observation but also a means of improving that learning. At a later date all staff at the Centre became involved in this process.

Throughout all these stages I would be leading and learning from the process. At each stage I reflected on what was happening and on my role in the process. This cyclical process is shown in Figure 1 and was vital to my development as a reflective practitioner.

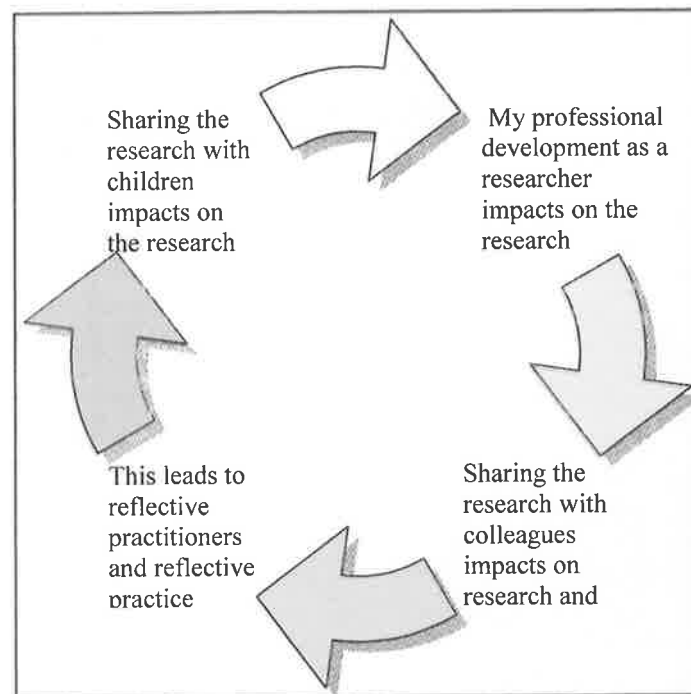


Figure 1: Reflection, Research and Participants in the Study

There are further important participants to include in this cycle and they are the children themselves. This research has meant that for the first time we have included the children in reflecting not only on the learning within an activity but on their own and the staff's part in that activity. This process gave me and the staff a different perspective on the pedagogy at the Centre.

When I started this project I knew that the connection between my role as researcher and professional role, as leader at the Centre, would become interlinked. These links have had both positive and negative effects. The figure below illustrates how the research has impacted on me as a researcher

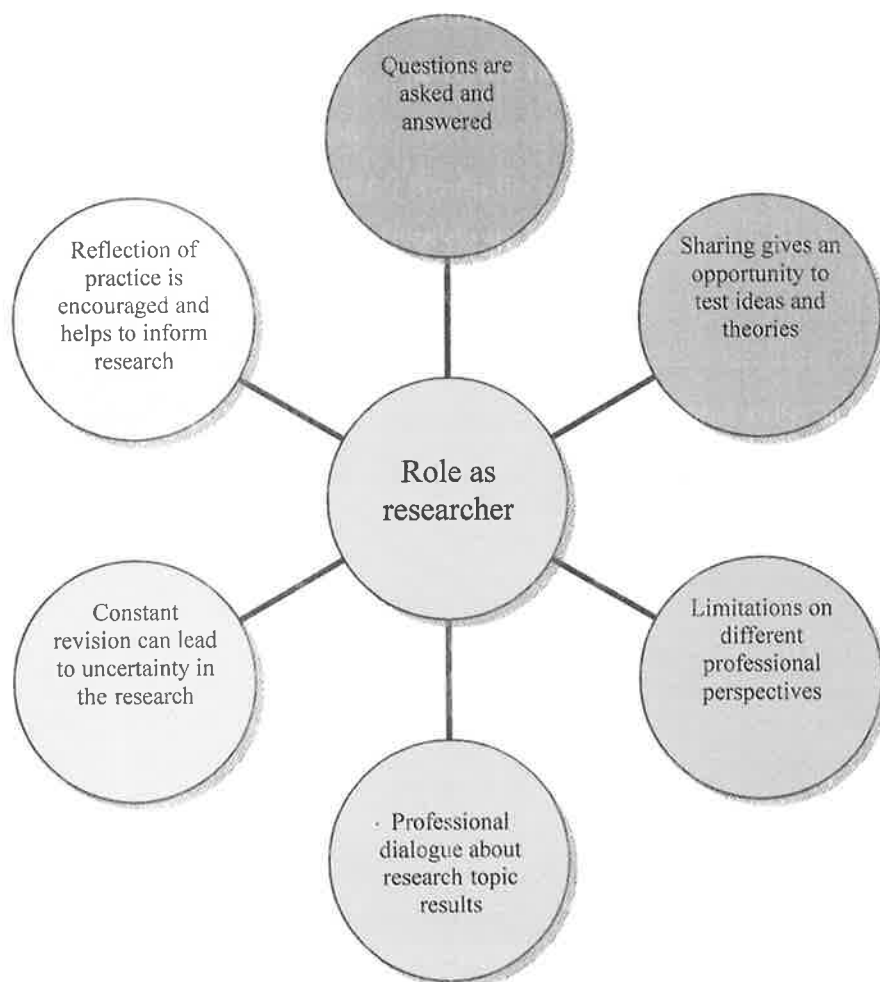


Figure 2: The Impact of the Research on my role as Researcher

What I did not fully understand at the start of this research was the impact that sharing my research would have on my professional role, the professional role of my colleagues and the interrelationship between these. Figure 3 is a summary of this complex interchange, as I see it. The process of sharing can result in both positive and negative effects on my role as researcher and as leader and both needed to be managed in order for the research to progress.

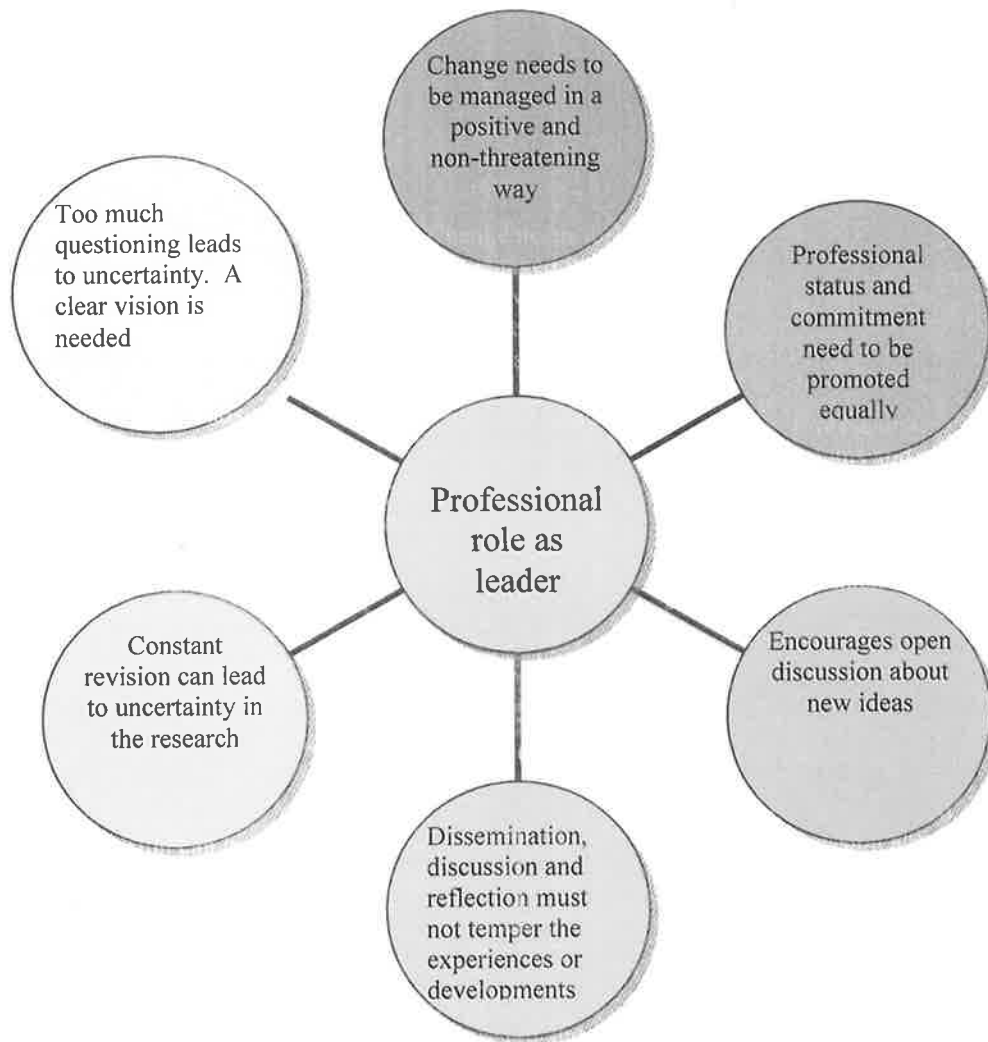


Figure 3: The Impact of the Research on my role as Early Years Professional

Embarking on this study has not only been a professional journey but has been a personal one. I have become more knowledgeable, confident, passionate and articulate about my area of interest. Alongside this I have made both professional and personal relationships that will influence me and my thoughts in the future. As a result of my research I have developed a deeper understanding of children and adults in the learning environment. How they interact and react differently, and sometimes in the in the same way to various learning situations that are part of everyday life experiences.

This research has helped me understand the power that is within child observation. This is the key that I can use to give children ownership of their learning and adapt the environment can be tailored to suit their learning dispositions and their needs, it gives us a strategy to use to become more reflective practitioners and to develop reflective practice. The learning dispositions in the future will enable me to explore in greater depth children's learning when they are at play and the adults' role in that play. This is such an important role if early years pedagogy is to be based on play.

I have been astounded that the children at the Centre have been able to develop the ability to understand more about their learning and the learning process. In some cases they have been able to verbalise this. Children not only progress socially when they start in an early years setting but they also experience progress in learning. Understanding more about this learning process can only be of benefit to the child and the early years professional.

The research has improved my own professional dialogue with the children and the quality of my reflection is guided by the children themselves. I am no longer able to measure impact by what I think is happening but need to regulate my ideas by observing and understanding what the children are saying. This is not the end of the process for me but the beginning and I look forward to using my learning disposition activities to lead the way through the rest of my personal and professional journey.

PDP 1:2 THE PERSONAL AND PROFESSIONAL JOURNEY

Personal Skill Audit

November 2007

Good knowledge of early years children and their development

The ability to break down a problem into manageable steps

Good time management

Some research skills gained through Masters Research

Good word processing skills

Capacity for hard work

Determination

May 2010

All of the above

A developing and deepening knowledge of academic writing and conventions

Growing confidence in my work

Slowly acquiring the referencing skills I need

A clear way forward: the end is in sight

Developing the ability to see my work through the eyes of others and to respond to and accept constructive criticism and to act on this

I now understand the need to constantly be thinking about changing and developing my work it will always be a work in progress

Beginning to be able to share my work with other professionals and enjoying the process

August 2011

More confident at referencing and some of the knowledge has automatically become part of my writing

Research skills have improved again with better knowledge and ability to research using the Internet

Growing awareness of names of individuals and research relevant to my work

I am confident in my ability to complete work and anticipate research being read by wider audience. Looking forward to feedback from this process and seeing it as a challenge

Thinking more about how I might be able further share my work with a wider audience

Beginning to prepare myself for my Viva and discuss who might be present.

I am often reading other research that confirms and supports my own and this gives me confidence.

PDP: 13 PERSONAL SKILL AUDIT

Organisational and time management skills

Analytical skills

Academic writing skills and technical language

Observational skills

Referencing skills and attention to detail

Autonomy

Use of Blackboard

UWIC e mail system

The stamina to maintain a high standard of work throughout the research

Table 1: Development and Training Requirements

TRAINING	ACQUISITION
End note Training	Attendance at training. Tutor Isabelle Durance
Further research skill training	Research Seminars UWIC Easter 2009
Academic writing skills	Self study and practice, module completion, formal feedback
Familiarity with research terminology and practices	Reading, personal research
Research Poster Training	February training at UWIC

PDP1:4 SIGNIFICANT DATES AND EXTRACTS FROM THE LEARNING DIARY

Beginning of the Research November 2007

The original research area focused on young children and learning styles, their observation and the possibility of influencing these to improve children's life long learning potential.

January 2008

Realised at training today that if I continue with my original thoughts on the research I will be collecting too much data to be managed and analysed. My research needs to be more focussed and I need to ensure my outcomes are achievable.

April 2008

Today, I gave my first thoughts on the ethical considerations for the research. This is an area I need to think through because of my relationship with parents, children and staff. In all of these, some would consider there is an imbalance of power and I must ensure that this does not sway in anyway decisions made regarding participation in the research. (Application for ethics approval September 2008)

May 2008

I have learnt that I need to improve the detail and accuracy of my work to reach the level required for this research. I think it will help me if I am able to complete work in time to return to it few days later to check on the writing conventions and reference protocol without worrying about the content.

March 2009

Meeting with tutor again I realise that my research questions are too wide and it would be impossible to evidence long-term benefits of the research. There is a need to refine research area more clearly, to move away from long-term aims, to concentrate on

learning dispositions and observations. The way forward needs to focus on the quality of the activities and the effects of the current interaction with the children.

Considered input from D M and M C regarding use of quantitative data analysis and the fact that this does not necessarily add validity to research. Validity is based on the right data and analysis for that particular research. I need to think about the data analysis for this research in these terms and not use methods just for the sake of using them.

A very important idea was thrashed out today in my supervision meeting. The focus of my research is changing. I am actually going to be able to recognise learning characteristics in young children. I will then be able to share this as an observational technique. I hope to be able to help children to develop and understand their own learning dispositions and skills. My data needs to enable me to evidence this process.

April 2009

One of the main issues for me from the 'training research days' are the ideas around 'Grounded Theory.' I think this may relate to the work I have been doing with staff on the (CLDOT). Need to read more about 'Grounded Theory.'

Approval received for research degree proposal form.

September 2009

Presented Paper at BERA Conference, Manchester.

One of the main areas of feedback was that this research would not be able to make any predictions or have evidence for children's lifelong learning potential or habits. This aim was not achievable within the parameters of my research and I fully accept and agree with this. The rest of the feedback was very positive. There was interest in areas that I had not foreseen as being important, like the data on the emotional development of the children or the connection between school, setting and the SOGS data.

Relevant ideas for research from other presentations at conference

EPPE Project findings that it is important to have the correct balance between adult led and child led activities.

Dr Christine Stephen. Stirling Institute. Pedagogy: the silent partners in the early years.

Suggest that practitioners should spend more time with children working together to and understanding the learning rather than focussing on helping children reach the next level in their development.

January 2010

I have submitted paper for BERA main conference this year. Now beginning to appreciate how the research has developed and become more focussed on achievable aims.

May 2010

Paper not accepted for conference disappointed: especially at one of the feedback points that states my research was not in keeping with the idea that children are able to voice their opinions and able to influence and affect what happens to them. I thought my work was actually reinforcing this idea. Young children may not be able to verbalise their thoughts and opinions fully but in my research through careful observation of their actions and reactions I will be able to understand what they are saying. It was quite a shock that from my abstract completely the opposite idea has been interpreted. I will have to guard against this in the future by emphasising this aspect of my work.

Towards the End of the Research February 2011

I attended training session on producing research posters. I submitted poster to UWIC Poster competition. I found this process very informative. Scaling down my research to fit onto a poster was a worthwhile process as it makes you focus on what is really significant in your research.

July 2011

This month had abstract accepted for TACTYC Conference in November. I successfully adapted my work to meet the conference theme about young children and school readiness. I will be giving a 20-minute presentation on my work. I am particularly pleased with this because the TACTYC journal is one that I find very informative, enjoyable and particularly relevant to the early years

Table 2: Training and Conference Attendance

TRAINING AND CONFERENCE ATTENDANCE	
November 2007	Initial Professional Doctorate Information and Training
January 2008	Lecture Research Skills
April 2008	Endnote Training
May 2008	'The Researcher' two days training UWIC
September 2008	BERA Conference Edinburgh
February 2009	'Catch up' and lecture on Research Methods and Design
April 2009	Two days Research Training and Workshops
September 2009	BERA Conference Manchester
December 2009	IWA Meeting 'Better Learning'
February 2010	IWA Meeting 'Effective Schools'
March 2010	IWA Meeting
September 2010	Attendance BERA Conference
November 2010	Conference Howard Gardner
January 2011	Research Poster Training at UWIC
February 2011	Poster Symposium UWIC
September 2011	Attendance BERA Conference
November 2011	Attendance and presentation at TACTYC Conference

PROFESSIONAL DEVELOPMENT MEETINGS AND REVIEWS	
December 2007	Tutorial Professor Janet Laugharne
January 2008	Initial feedback on first module 'Contextualising Professional Change.'
April 2008	Tutorial Professor Janet Laugharne
May 2008	Tutorial Professor Janet Laugharne Research Proposal Form Progress Meeting
June 2008	Tutorial Professor Janet Laugharne Ethics Form
July 2008	Annual Monitoring Report
January 2009	Tutorial Professor Janet Laugharne Progress Meeting
March 2009	Tutorial Professor Janet Laugharne Formative Feedback Pilot Study
July 2009	Annual Monitoring Report
December 2009	Formal Feedback Literature Review
February 2010	Progress Meeting Professor Janet Laugharne
April 2010	Tutorial Professor Professor Janet Laugharne
September 2010	Annual Monitoring Report Dr Sian R Williams
March 2011	Progress Meeting Professor Janet Laugharne Dr Sian R Williams
July 2011	Tutorial Professor Janet Laugharne Dr Sian R Williams
August 2011	Tutorial Professor Janet Laugharne Dr Sian R Williams
September 2011	Annual Monitoring Report Professor Janet Laugharne Dr Sian R Williams

PERSONAL AND PROFESSIONAL DEVELOPMENT	
December 2007	Initial meeting with staff at 'workplace'
January 2008	Presentation 'Contextualising Professional Change.'
May 2008	Formal feedback and return of paper 'Contextualising Professional Change.'
June 2008	Ethics Approval Form Staff Interviews
July 2008	Roundtable Event
October 2008	Pilot Study
January 2009	Submission of abstract for BERA 2009
April 2009	Grounded Theory
April 2009	Research Proposal Approval
January 2010	Submission of abstract BERA Conference 2010
March 2010	Submission of Literature Review
May 2010	Feedback to staff May 2010
July 2010	Literature Review Seminar
September 2010	Submission draft PDP up to July 2010
October 2010	Submission of Methodology and Design skeleton chapter
January 2011	Submission of first draft Methodology and Design
February 2011	Produce Research Poster
March 2011	Staff Questionnaire and analysis
May 2011	Submit first draft Results
June 2011	Inset with Centre staff feedback research session
July 2011	Submission of Methodology and Design Submission of Results Abstract for presentation accepted for TACTYC Conference November 2011
August 2011	Submit Introduction and feedback on PDP Acceptance of paper for TACTYC Conference in November
September 2011	Submission of PDP Submission of Introduction
October 2011	Submit final document for 'reading'

PDP 1:5 MODULE SUBMISSIONS

DECEMBER 2007 Contextualising Professional Change

This module involved me in my first formal discussion with staff about my plans for the professional doctorate. I enjoyed these discussion and they engendered good professional dialogue about the children and their learning. Staff were very supportive of the area I had chosen to research and offered to help and participate whenever they could. These

discussions with staff helped me to clarify the aims of the research and to reinforce the importance of the professional change area of the doctorate programme.

The next step was to notify the Governing Body of the Centre of my plans and to get the agreement of the chair to release me for half a day per week. This could be used for attendance at conferences, training, meetings and personal study. This meeting was successful and again governors were enthusiastic about the proposals. The professional change involved in this doctorate requires the 'goodwill' of others and this has not been an issue for me.

The content of the module quickly came together, as usual I struggled with the referencing and this was noted in my first informal feedback. I have decided to invest in the referencing system 'Endnote.' This will take some time and effort to establish and I hope it will be worthwhile. Referencing is something that concerns me and it is a discipline that I must master if I am to complete this study.

This module included a presentation to fellow research students at UWIC. My presentational skills I would assess as average because I have done these type of presentation in my Masters Programme. I think I did better in this part of the module than in the written work.

I passed this module. The feedback was supportive. Many of the comments were what I expected and they gave me a constructive way forward.

MARCH 2010 Literature Review

This for me so far has been difficult because of the attention to detail required and the need to ensure that all referencing is to the required standard. I have relied perhaps more than I should on my readers. I intend to review all my references on 'Endnote' and go through my lecture notes to ensure that I am using it in the best possible way. This will improve my skills and confidence in this area. I have purchased a reference book and

find this very useful when referencing. I have already begun to constantly add to this chapter and this will continue throughout my research.

MARCH 2011 Methodology and Design

This was an unusual chapter in that I found the writing quick but getting the organisation of the chapter correct took much longer. It was difficult to write in the past tense as the content was something that I was currently experiencing. This chapter required a lot of background reading because of the need to describe the research design and methodologies using the correct vocabulary and terms much of which was new to me.

I was concerned that my research was not connected to any accepted perspective or theory. I became aware of this convention at the BERA Conference in September 2010. Discussed this at meeting with tutors and found out that does not always have to be the case with educational research.

JUNE 2011 Results

Writing this chapter was very difficult especially deciding what to include from all the data and its analysis. There was a tension between the length of the chapter and including the detail that gave insight into my work and the information that made my research interesting for the reader. My mentors drew my attention to this problem and it took time for me to work this through. I was unsure what should have been included in the body of the text and what in the appendix. I gratefully received guidance on this from my tutors. The chapter itself entailed tables and figures. I needed to improve my IT skills to get the look I required.

APPENDIX 1 ABSTRACT BERA 2009

How Young Children Learn And The Implications For Teaching And Learning In An Early Years Centre In South East Wales

Background

This paper aims to further the knowledge and understanding of how children between the ages of two and four learn within different early years settings. The background research covers child development, learning styles and theory and theory about reflection and the reflective practitioner.

The timing of the project is apt because of the introduction of the Foundation Phase in Wales and its emphasis on child observations to inform and develop early years practice. The document published by the Welsh Assembly 'Observing Children' states that "Opportunities to observe children should be an integral part of the daily routine of practitioners working within the Foundation Phase" Welsh Assembly (2008 p.3)

Learning styles for the purpose of this research will describe and categorise the processes that learners use to acquire and master new knowledge and skills. Much of the existing learning style theory is based on the learning of older children rather than the two to four year olds in the study group. The child development study will focus mainly on how children grow physically, socially, emotionally and cognitively during the two years of the study period and to observe how this affects their behaviour and learning.

This research investigates whether these young children demonstrate any learning style preference, or show what their adult learning style might be. The results of this study will indicate whether the already existing literature on learning styles is relevant and can be applied to this group. Initial investigations and my pilot study have led me to believe that there is opportunity to develop original research by considering these two areas of knowledge, applying them in practice and then testing the theory.

This project will study how learning style and child development theory can enhance one another to give young children the best possible chance of achieving their full potential, both in and out of school. Identification of learning style is important according to Gavin and Reid because it gives children the opportunity to achieve a degree of independence in their learning. They state, "Knowledge of learning styles can equip all students for life-long learning." Gavin and Reid (2005 p. 64). The more children know and understand about their own learning style, the more adept they become at managing and leading their learning independently focussing on what interests them. The better a child understands their own learning processes the more able and lifelong learners they become Whitebread *et al.*, (2005 p.42).

Research Objectives

Can we identify and observe learning styles in children aged twenty four to forty eight months?

Do young children change their learning styles with age or adapt them to different early year's settings or activities?

Is it possible to adapt pedagogy to influence young children's learning potential through understanding their acquisition of learning styles?

Research Methods

This research will need to consider the effects that the close relationship (the researcher is manager of the setting) has on the data collected. This relationship also means that the researcher will have detailed background knowledge of the adults and children involved in the study. It is necessary to manage this appropriately and where possible involve a third party to prevent this relationship affecting both the data and the results. Le Compte and Goetz (as cited in Bryman 2001, p 272) proposed that this was an advantage and states that "prolonged participation in the social life of a group over a long period of time allows the researcher to ensure a high level of congruence between concepts and observations."

The data collected will originate from child observations, and semi-structured interviews with the child's main carers both at home and in the early years setting. It will also draw on records from both the settings and external sources. Regular six monthly observations starting at twenty four months will be taken of five groups of six children, two childcare environments, a school and an informal care setting. Knowledge about learning styles will enhance the observations of the children's learning and help interpret the actions observed.

Initial Analysis

The children involved in the study will be described using the following categories; the Capable Learner, Novice Learner and Practised Learner. These terms are derived from listening to early years practitioners within the setting. This initial analysis will form the basis for further observations and adapting pedagogy to better meet individual learning requirements.

My research will involve developing teaching strategies to encourage the observation and development of learning skills and styles. A cyclical process would continue over a two-year period, testing these strategies in practice, reflecting on the results and suggesting further improvements. "Theories of development and learning should logically inform the curricula practices of early childhood education primarily because children at this stage of the lifecycle are acquiring the very cognitive and linguistic abilities necessary for the acquisition of content material. (Spodek and Saracho, 1990)" Edwards (2005, p. 67).

References

Bryman, A. (2001) *Social Research Methods*, Oxford, Oxford University Press.

Edwards, S. ((2005)) *Children's learning and developmental potential: examining the theoretical informants of early childhood curricula from the educator's perspective* Early Years An International Journal of Research and Development, 25:1, 67 - 80.

Gavin, R. (2005) *Learning Styles and Inclusion*, Sage Publications.

Welsh Assembly Government (2008) *Observing Children*. Department for Children, Education, Lifelong, Learning and Skills.

Whitebread, D., Anderson, H., Coltman, P., Pasternak, D. P. & Mehta, S. (2005) *Developing independent learning in the early years*. Education 3-13 International Journal of Primary, Elementary and Early Years Education.

APPENDIX 2 ABSTRACT TACTYC CONFERENCE NOVEMBER 2011

OBSERVING, UNDERSTANDING AND DEVELOPING LEARNING DISPOSITIONS IN THE EARLY YEARS

The Foundation Phase in Wales sets out to transform early years care and education. This research focuses on children aged two to four and how this age group learns. It crosses the barrier that can exist between childcare and education. This barrier may reflect different pedagogies of learning through play and child led activities and formal learning that is adult led. This research focuses on the child and how they learn in different circumstances. It provides the early years professional in both school and care settings with a common framework from which to observe young children's learning. It provides the practitioner with a cycle that includes both the adult and child in reflecting on and learning about learning, however the situation has arisen. In terms of debating 'school readiness' this research focuses on the practitioner responding to the learning of the individual child.

The research seeks to place the child and their learning disposition at the heart of teaching and learning. The Welsh Assembly proposes that 'For children's learning to be most effective the learning experiences need to be meaningful for the children. Opportunities should always be given for them to make choices according to their preferred style of learning, or to choose through a combination of learning styles,' (Welsh Assembly Government, 2008, p. 10).

Research Questions

- a) Can we identify, observe and develop an understanding of learning dispositions in children aged two to four years?
- b) Do young children change and develop their learning dispositions with age or adapt them to different situations or activities?
- c) How is it possible to adapt pedagogy to influence a child's learning potential, through understanding their acquisition and use of learning dispositions?

Research Methods included semi-structured Interviews with staff, parents and children; focus group interviews and Observations of adult- and child-led activities indoors and outside.

Initial Results

An observation tool that can be used to observe children's learning both indoors and out adult and child led.

A typology of learning that can categorise and describe young children's learning for practitioners.

A typology that gives adults a common vocabulary for discussing learning

A means of comparing adult planning with actual practice

A research cycle that observes children learning, necessitates a discussion of the process involved for both adult and child, and leads to a way forward

An action research cycle that includes methods for evaluating learning dispositions and leads to change in pedagogy

The research seeks to place the child and their learning disposition at the heart of teaching and learning.