Developing Good Practice in the Provision of Outdoor Education in the Early Years

Jillian Gaunt

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School of Education

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Abstract

Developing Good Practice in the Provision of Outdoor Education in the Early Years

This study is an investigation into the relationship between children's use of the outdoor environment and the early years curriculum. An action research approach was used in which cycles of observation, reflection and intervention led to deeper understandings about children's learning and the way it can be facilitated through the use of outdoor learning experiences. The findings highlight the potential an outdoor space can offer children as a base for learning and demonstrate how learning outdoors enables children to develop dispositions which are vital for their future achievements. I set the research in the historical context by drawing on the work of people in the past who have influenced the development of early years education and whose work is still relevant today. The research process has included a major action research cycle through which the outdoor environment of the setting was developed from a small nursery garden to a full forest school experience using the schools grounds and beyond. Within this major cycle, other smaller cycles have focused on the way in which children learn in the outdoor environment:

- *communication and the development of cognitive structures in the outdoor environment;*
- *children learning through observing other children;*
- *offering choice in outdoor play;*
- *children's use of physical play activities;*
- *patterns emerging in play situations linked to the development of schemas.*

The action research process has been empowering for me as a researcher which in turn has led to the children making more decisions about their own learning and having more opportunities to make choices. Links are made between my own constructivist stance as a researcher and the ways in which children learn. The collaborative nature of action research has enabled all the practitioners in our setting to become part of my critical friendship group.

I also analyse more recent developments and identify the tension which exists between statutory requirements and the learning needs of young children. I identify ways in which these requirements can often work to prevent practitioners from providing effective practice for our youngest children.

Introduction

This research has aspired to demonstrate the value of enriching the experiences of children in the early years through using the outdoor environment as a base for learning. By observing children's interactions, I have tried to discover best practice for teaching and learning in the outdoor context, and this has led me to focus on social interactions, communication styles and on how learning develops through play. My research has been strongly linked to the early years' curriculum and to finding out how young children acquire knowledge and skills and develop concepts. This has enabled me to propose best practice in terms of the curriculum content and how it is delivered. This in turn links to the role practitioners play in an early years setting in providing and promoting outdoor education.

This investigation is set within the framework of national policy and legislation which has changed considerably over the time period of this study. Over the past ten years pre-school education has gained a national curriculum which has seen many changes. It began with the Desirable Learning Outcomes (GB/SCAA 1996/1998) then became the Foundation Stage (GB/DfEE/QCA 2000) and more recently became the Early Years Foundation Stage (GB/DfES 2007). Other important documents have also impacted on early years practice including the Literacy Strategy (GB/DfES 1998) Numeracy Strategy (GB/DfES 1999) and Every Child Matters (GB/DfES 2005).

My research has led me to focus on the implications of these curriculum changes in relation to the outdoor environment and by observing the interactions of children I have also tried to discover best practice for children in terms of their development. I have also focussed on attitudes and values relating to the outdoors including the general changing attitudes of our society towards the environment and how we treat it. My research question, 'how to develop good practice in the provision of outdoor education in the early years' evolved from these issues as the study developed. I experienced the power of being a teacher researcher and I discovered how valuable the research process was to my practice and to my professional development. I learned about the theory and experienced the practice behind learning dispositions and the impact they had on a child's learning and I developed an understanding of the importance of outdoor education for children in the early years.

My background and experience

I began my teaching career in 1982 having completed a B.Ed., which trained me to teach children from three to eleven years. My course included completing the Professional Semester in Early Childhood Education at Lock Haven State College in Pennsylvania USA. I had also completed my NNEB which gave me additional, valuable practical experience in working with young children and experience of child development up to seven years. While doing my NNEB I had the privilege of being taught both in placement and in college by some inspiring individuals and for the first time since I left my own primary school I discovered I enjoyed learning.

My Mother came to teaching as a mature student and I am aware of absorbing concepts and ideas which she spoke about during her initial training and later during her conversion course to teach nursery children which included lectures from Alice Yardley. At the time my passion was for the five to seven age range and my teaching career started with a vertically grouped infant class. I valued my pre-school experiences but I did not think I was going to work in a nursery. Big changes came to education throughout the 1980's and four years later, when I took up my second teaching post, the vertically grouped class was on the way out and the national curriculum was on the way in. I completed a Dip. Ed. in language and literacy and two years later I was offered the opportunity to be teacher in charge of the nursery. I tossed and turned in case I did not like it but I knew I could return to the primary classroom if a position became available, so I accepted the offer. I soon discovered that I loved working in the nursery and as the screws tightened on teachers working in the main school to deliver test results and introduce structured lessons, I found the early years' curriculum still offered the opportunity for creative thinking. I also found myself working for the first time as part of a close team of highly experienced, very motivated practitioners who genuinely wanted to do the best for each child that entered our setting. They were open to change, to professional development and to constantly seeking better ways of giving children the best start in their school career. There was no doubt in my mind that this was a place I wanted to stay which was a big surprise to me. Over the years I gained expertise and experiences which I hope made me a better practitioner including a visit to Washington USA and to Denmark to experience other perspectives on early years provision. These two experiences gave me the opportunity to observe two very different approaches to early years education at different ends of the intervention scale. I never felt the urge to return to the main school to teach,

although I always valued being part of the whole school staff. I continued to make opportunities to keep contacts with older children and I loved being able to watch children I had taught mature and progress through their education. After the birth of my son I returned to work as part of a job share which gave me the opportunity to build a professional relationship with another person on the team and the support, dedication and commitment of my two job share partners has been invaluable over the years. After returning to work following the birth of my second son I began to look for a project on which to focus my attention. I had always been an outdoor person and loved to spend time with my own children in the natural world so my thoughts turned to the nursery garden. As a team we started to look at ways of developing the outdoor play area in our nursery setting. At that time there seemed to be little interest at a national level in the role of outdoor play. My research has been a process of self development built on my considerable expertise in children's learning in early years education. Through being engaged in the research process I was offered some part time lecturing at Nottingham Trent University, teaching early years students and later primary PGCE students. This gave me the opportunity to match theory to practice and to evaluate my own teaching.

The research setting

I teach in a nursery unit attached to Richard Bonington Primary and Nursery School in Arnold, Nottingham. It is large primary school of approximately 350 children with a 40 place nursery unit. The school was built in the 1950's to serve the local community in the town of Arnold which is five miles north of Nottingham. The children come from a mixed area of private and social housing. The school was named after Richard Parkes Bonington, a locally born artist and it occupies a large attractive site. The nursery was built in the 1970's and offers a morning session for up to 40 children and an afternoon session for up to 40 children aged three and four years. There are five members of staff including two part time teachers, one full time senior teaching assistant and one full time and one part time teaching assistant. The nursery is in a separate building within the school grounds. It has its own outdoor play area separated from the rest of the school by a fence. During each nursery session outdoor play is available to the children.

How the research began

My research began through a desire to improve the quality of education offered to our children when using the outdoor environment. An early years

setting is dependent on establishing a successful team of practitioners who support each other and whose individual strengths are recognised. It is the importance of team work which led to an action research approach being most appropriate for this study. As a team we began by looking at the way we used the space in our nursery garden. At the time the main play area was sloping tarmac edged with grass and to the side of the nursery was a long strip of grass with mature trees. On the tarmac area there was a square concrete sand pit and the area outside the nursery doors was covered by a veranda. The challenge was to make better all year round use of the available space. In discussion with the nursery team we decided to try and create a sensory garden and we chose the area of sloping grass for our project. Our budget was on a shoe string so we had to look to the community for support. The project took about eighteen months to complete and the nursery children were involved at all stages from planning to planting. Much of the garden was recycled, for example, the retaining wall was made from old telegraph poles, the path was edged by recycling council tree stakes and the top soil was waste potting compost from a local plant nursery. Parents and grandparents helped with the heavy digging and a local gardener offered his advice. We took the children on a visit to a local garden centre to get ideas for our garden before we drew up a simple plan (see Appendix 1).

We wanted to ensure the children were involved at all stages of the process. (see Illustration 1 and 2) I began to observe how children used the garden; sometimes they took part in planned activities and sometimes they made up their own games. It was fascinating to observe the way children reacted when an adult went into the garden, within seconds a group of children were eagerly wanting to know what jobs needed to be done such as putting down gravel for the paths, weeding, planting flowers, herbs and vegetables, watering, taking items to the compost bin and in group situations, collecting leaves to make mulch, pruning and harvesting.

Illustration 1 Our sensory garden

Illustration 2 Our sensory garden

The children took ownership of the garden which gave them a sense of responsibility towards it and this led me to begin to focus on a number of issues relating to outdoor play (see Appendix 2). I am very fortunate to have worked with an experienced team of practitioners who were open to developing new ideas, keen to improve practice and passionate about the value of the outdoor environment. We discussed the issues which arose from the development of the garden and decided to carry out a series of observations on outdoor play and so my PhD research study was born.

The initial aims of this study were:
- to investigate and promote the relationship between a child's use of the outdoor environment and the early years' curriculum;
- to explore children's attitudes, values and perceptions towards their environment through the early years stage of education including how children learn best;
- to monitor through observations the development of children's behaviour when using the outdoor school environment making appropriate interventions and noting patterns which may emerge;
- to explore the attitudes values, and perceptions of the adults involved with the setting towards the outdoor environment and reflect on national changes in attitude towards outdoor education;
- to explore relevant teaching and learning methods for children in an early years setting and relate them to appropriate developmental levels;
- to develop a research based framework for effective practice in using the outdoor environment in the early years.

As the research developed from these initial aims, three interconnecting themes began to emerge which helped to establish my research question which is:

   '*how can I develop good practice in the provision of outdoor education in the early years?'*

Theme 1 - Children's learning:
- child development;
- how children learn;
- thinking skills and schemas;
- learning styles and children as partners;

- gender issues;
- the use of observation.

The outcome of this theme led me to understand the impact of learning dispositions for children's outcomes by exploring the theory and the practice.

Theme 2 - The impact of national policy:
- the early years curriculum;
- the OFSTED experience;
- the development and changes in environmental education;
- renewed interest by the government into using the outdoor environment as a base for learning.

The outcome of this theme led me to a better understanding of the power of being a teacher researcher as the research process helped myself and my team overcome some of the pressures involved in implementing national and local policy. It also enabled us to make positive decisions about the way we delivered the curriculum.

Theme 3 - Development of the outdoor environment
- the history of the nursery garden;
- outdoor play;
- play spaces and gardens;
- the forest school approach;
- nature deficit theory.

The outcome of this theme led me to a greater understanding of the importance of giving children the opportunity to interact in the outdoor environment through outdoor education.

Organisation of the chapters

It is difficult to write up this research in a linear way because it is not a linear process. It proved difficult to find a clear structure because the nature of the research is holistic. Each part is related to and inter-twined with another part. I have therefore attempted to write in a meaningful way which demonstrates this constant overlap of issues and concepts. Some people are thought to learn best when given the whole picture to break down into smaller parts, other people learn better when given small parts to put together into a whole picture. I believe my study is better seen as a whole picture which has been carefully taken apart to see what is happening inside. The whole picture in this case is the provision of early years outdoor experiences. The three key

pieces of the puzzle are the theory and practice of dispositions for learning, outdoor education in the early years and teacher as researcher. By the end I hope all the pieces of the puzzle will have been put back together and the picture will become clear. I have chosen to include a consideration of the literature within each chapter, focussing on the reading I found most relevant to that chapter rather than providing a separate literature review. By embedding the relevant literature in this way I hope to establish clear links between the literature and the development of my study. I now give a brief introduction to the contents of each chapter outlining some of the key issues.

Chapter One - Starting points – epistemological perspectives
In this chapter, I set out my own understanding of a theory of knowledge, the epistemology leads me to reflect on my own experiences as a learner. I discuss different models of the learner and positions on the curriculum with a particular emphasis on the constructivist approach to learning. I have explored some of the important theories relating to how children learn and linked this to my own experience as a learner. This chapter links to my first theme and explores the initial vision of theory and practice connecting to dispositions for learning. Work in this chapter relates to Chapter Six.

Chapter Two - The learning context – policy and practice
In this chapter, I have continued to explore different models of the learner and positions on the curriculum. I have linked them to the early years curriculum we offer in our settings and consider government documentation which has shaped our early years practice in the last ten years. I also discuss issues of power relations and the impact on practice of being a teacher researcher. This chapter links to my second theme relating to power issues, the impact of national policy and the role of a teacher researcher.

Chapter Three - The learning context - play and pedagogy
In this chapter, I explore some of the issues around the importance of play in early childhood education, the role of the pedagogue and the importance of dispositions for learning. This links to the theory and practice of dispositions for learning and the role of the practitioner as a researcher. This chapter relates to my first and second theme as it includes dispositions for learning as well as the role of a practitioner as a researcher.

Chapter Four - The learning context - outdoor education

In this chapter, I focus on outdoor education including the history of the nursery garden in this country, nature deficit theory and the forest school approach to learning. The introduction of the FS and later the EYFS, offered the opportunity for settings to achieve a relevant curriculum in the outdoor environment for all young children. This was a critical time for early years' education and practitioners needed to be informed by research. This chapter reflects on the provision of outdoor education in the early years and links to my third theme of gaining a greater understanding of the importance of giving children the opportunity to interact in the outdoor environment through outdoor education.

Chapter Five - Methodology

In this chapter, I outline my methodology which has taken an action research approach. Evidence of research being carried out by other people in the area of early years' outdoor education was difficult to locate and I had to look to diverse areas to find relevant projects. As my research is specific to my situation, and is in effect a case study based on the observations of children in a particular area, I consider how relevant my findings are to the wider community. My observations are mainly restricted to the environment in which I have carried out my research but I make the claim that it can help shape educational theory and practice beyond my setting. This chapter links to my second through my role as teacher researcher.

Chapter Six - Taking action

In this chapter, I include the main body of observations undertaken mainly in my setting and outline the major and mini cycles of action research, linking them to the outcomes for the child and the practitioner. I demonstrate the power of schemas in helping practitioners to understand a child's stage of development and future learning needs. This chapter links to my first theme and continues to explore the vision of theory and practice connected to dispositions for learning discussed in Chapter One.

Chapter Seven - Conclusions and reflections

In this chapter, I draw my conclusions from my research question, based on the evidence obtained from the cycles of action research. These conclusions relate to key themes which emerged during the action research process. I have reflected on these findings in relation to the context of previous chapters

and I set out my recommendations for good practice in outdoor education in the early years by drawing together my three initial themes:

- Children's learning- understanding the impact of learning dispositions for children's outcomes by exploring the theory and the practice.
- The impact of national policy- understanding of the power of being a teacher researcher particularly in relation to implementing national and local policy and enabling positive decisions to be made about the way the curriculum is delivered.
- Development of the outdoor environment - understanding the importance of giving children the opportunity to interact in the outdoor environment through outdoor education.

Terminology

In this study I refer to the place where a child attends their pre-school education as the *setting*. The people who work in the setting are referred to as the *practitioners*. The Foundation Stage is referred to as FS and the Early Years Foundation Stage is referred to as EYFS. The Early Learning Goals are referred to as the ELG's.

A note on the context of environmental education

I have studied how children have interacted in the outdoor environment but I have not looked to develop a policy for environmental education which would have involved learning specifically *in*, *about* and *for* the environment. I have looked at what children gain in terms of their development and education by working outside and this does touch on environmental issues but my main focus has not been on education for sustainability. Initially I tried to find my place in the available literature, specific literature to support my area of research was found in diverse areas and by tracing some of the early pioneers of nursery education I was able to draw on some powerful literature which is still relevant today. On a wider scale the attitude of people towards the environment has changed in recent years with environmental issues being taken more seriously. The interest of central government in sustainability and improving our stewardship of the environment has opened up new opportunities for schools to value interactions in the outdoors and whilst this has not been my main focus, my research has much to contribute to this agenda.

Chapter One
Starting points – epistemological perspectives

In this chapter I reflect on my own learning as a researcher and how I have gained knowledge throughout the research process. I compare my experience as a learner to the experiences of the children I teach and explain how epistemological beliefs underpin my own learning as a researcher and the learning of children in the early years. Work in this chapter links to my first theme - *Children's Learning.* The development of this theme will lead me to a better understanding of the impact of learning dispositions for children's outcomes by exploring the theory and the practice. I discover how each theory puts a different emphasis on the curriculum and the way it is taught. I identify the paradigm which is best suited to this study and link it to a qualitative approach to research. I discuss my own understanding of good practice in the EYFS and I explore the work of some prominent people who have influenced our thinking on how children learn, relating this to my own experiences. The work

of Piaget, Vygotsky and Bruner have been central to my understanding of how children learn and the need to match teaching to learning in order to maximise achievement. I also discuss some major research projects that were relevant to my study and relate their outcomes to my findings. Discovering an answer to the question "how do children learn?" became a focus for my reading and my quest to answer this question led me to consider the underlying purpose of our early years curriculum, the value of its particular set of objectives and power issues in policy making. The work of Mac Naughton (2003) was influential in identifying theories of learning and curriculum development which enabled me to establish my own position as a constructivist. Throughout this chapter, I refer to the acquisition of knowledge and understanding; knowledge could be simply defined as 'information about something' or 'knowing that something is the case' but in this context I take knowledge to be a deeper level of understanding something which involves dispositions and attitudes based on experience. I begin to develop ideas into research which prepares the way for my research data and discussions in Chapter Six.

1.1 My learning journey from practitioner to researcher

I have been on a long learning journey with this piece of research in my quest to deliver the best experiences for the children in our setting through using the outdoor environment. It has been a long journey in terms of time but also in

terms of the experiences I have been through as a professional teacher and as a researcher. My research began with three elements (see Fig 1.1)

MYSELF AS PRACTITONER

Starting with strong views based on my experience.

A desire for best practice.

ACTION RESEARCH

My chosen methodolgy.

Close observation.

CHILDREN

Learning in my setting

Fig 1.1 Three elements at the start of this study

Although my work setting has remained in the same place throughout this research, many changes have taken place in terms of the curriculum, staff, children, the physical environment and changes in attitude at a local and national level towards the early years and towards the outdoor environment. Reflecting on the process I had been through on my research journey I considered what I had learned and how I learned it. I started from a small base when it came to research but a wide base in terms of teaching experience. I had to tune my brain into academic learning and I discovered how liberating it was to be able to challenge the people with the power and to probe the thinking behind policies and practices. I found it enlightening to take a closer look at my setting through observation. I found myself questioning a wide range of assumptions which expanded my knowledge as I looked for answers. I discovered the value of being part of a team who learned together; discoveries are much more exciting when you can share them with other people who have the same interests. Observation became a key tool in my research for collecting data. I learned from my own

observations and from the observations under taken by other professionals in my setting. Having the benefit of discussing issues with people who knew the children well was a huge support and had the effect of sometimes confirming my thoughts and sometimes opening up new issues and ideas. Theories and thoughts are often confirmed or dismissed when other people come to similar conclusions. This is part of a triangulation process by looking at an issue from a number of different positions to gain information. I discuss this further in Chapter Five.

I have benefited from the work done in the past by people who had a passion about the needs of young children. There is a sense of awe in reading the work of people like McMillan (1930) who spoke out against the norms of the day to stand up for her beliefs about the rights and needs of children. People have dedicated their lives to finding the best way to teach and nurture young children in terms of theory and of practice. I have discovered that there is never a simple answer to my questions and never any consensus of opinion on the outcomes of research. I have to look at all the available evidence and then come to the conclusions that fit with my own beliefs based on my own experiences. This led me to discover that I was a constructivist because I understood that children should be given the opportunity to build their own knowledge and understanding through practical experiences and one of the best places to do that was in the outdoor environment. In order to gain knowledge there has to be a meaningful context and this context is not just an intellectual activity discovered through books and intellectual debate but is based just as much on the world around us which has an impact on what we do, what we understand and what motivates us to know more. The environment in which we learn is a key factor in the way knowledge, skills and understanding develop. The outdoor environment gives children a unique setting in which to learn because no two outdoor environments are exactly the same and each outdoor setting changes on a day to day basis with the weather and the seasons. Children are self motivated to use the outdoors. It can offer the same curriculum opportunities as the indoor environment and some opportunities that the indoor environment may find limiting such as space, natural materials, personal challenges, managing risk and sensory experiences. For me, these attributes made the outdoor environment an exciting setting to study. Children need to be active to learn and action supported by language enables children to internalise their new knowledge, extends thought processes and moves them on to a new stage in their learning and development. This is at the heart of the constructivist approach. When I considered my own learning and the knowledge I gained as a researcher, I discovered that I had gone through exactly the same process as the children I had observed (see Fig 1.2).
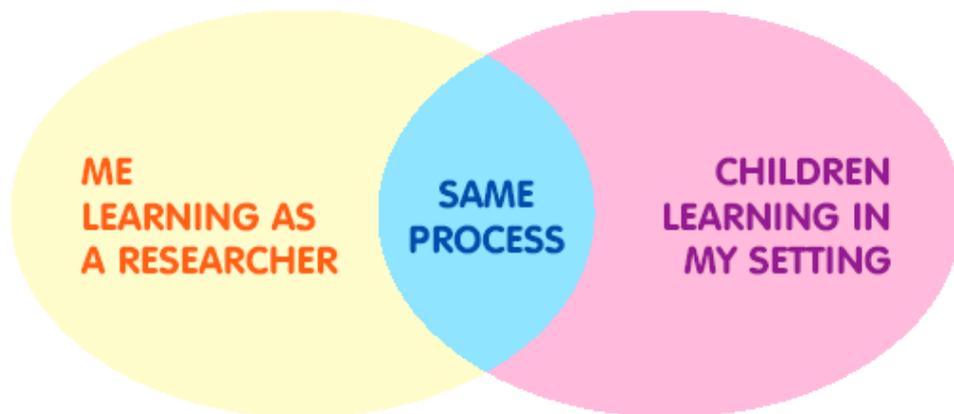
Fig 1.2 Following the same learning process

I found I made better progress because I was working in a social context (Vygotsky 1934) where others respected, supported and moved my thinking on. My learning had been well scaffolded (Bruner 1977) by the support I received from the university and through my reading. I needed a meaningful context to make sense of what was going on and so my setting became the focus of my study. I asked lots of questions using language to support my thinking and I made changes to test out new hypotheses. The changes involved first hand practical experiences which made the activities meaningful and therefore had a greater impact on my thoughts and my level of understanding. This comparison between me as a researcher and the children as learners, seemed to indicate that conducive conditions for learning are not age related.

1.2 Finding a paradigm

In locating my research within a paradigm, I found it useful to conceptualise the paradigm as a picture frame that encompassed the research topic. According to Hughes, (2001) if we frame a research topic with one paradigm, we see it very differently to the way we see it if we frame it with another. The way the paradigm frame is positioned gives the research a particular way of seeing what is observed. Looking at an early years setting from a behaviourist stance or frame would give a very different impression to looking at it from a constructivist one. As Hughes suggests:

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"A paradigm is more than a theory. Each paradigm is a specific collection of beliefs about knowledge, together with practices based upon those beliefs." (Hughes 2001 p31)

Hughes (p32) considers all paradigms to consist of three key elements and I found these to be a useful organisational framework:

- **A belief about the nature of knowledge** - for me this is constructivism.
- **A methodology** - for me this is action research. (See Chapter Five)
- **A criteria of validity** - for me this is triangulation. (See Chapter Five)

Moriarty (1998) said the link between a place where young children were cared for and the term "nursery" to describe a place where immature plants were tended, gave both places an association with the natural world. This link, Moriarty said, could be called a paradigm as described by Kuhn (1962) meaning theories, practices and organisations clustering together. Moriarty suggested that by clustering children, plants and gardening, it could be called a horticultural paradigm. Maybe I have clustered children and gardens together to form my own paradigm, or maybe that was done before when the kindergarten was invented! Given the context and my epistemological stance, positivist, structural and post modernist positions did not seem appropriate and I was drawn to take an interpretivist and qualitatative perspective.

1.3 Interpretivist
According to Hughes the interpretivist researcher's task is:

> " *to understand socially constructed, negotiated and shared meanings and re-present them as theories of human behaviour"* (Hughes 2001 p36)

Hughes suggests this means actively making sense of people's behaviour and interpreting it within a social structure, often with language as a basis. He considers that for interpretivists, knowledge is valid if:

> *"it is authentic, that is, it is the true voice of the participants in their research."* (Hughes 2001 p36)

Hughes describes this type of research as local and specific to a particular research project, based in a particular setting with particular participants.

Triangulation is often used to validate this type of research where more than one research method may be used. This criteria suggested by Hughes matched my study which was based in my early years setting and specifically involved the children and practitioners in that setting. I have not looked at broad trends and I appreciate that my study would be valid within limits, yet at the same time I felt I could justify my findings to a wider audience. Patterns of social behaviour, communication, attitudes towards working outside and the development of the learning space, became important factors in this study. This is compatible with the interpretivist paradigm and therefore it became the frame to fit this study. (see Fig 1.3)

A PICTURE FRAME FOR A PARADIGM
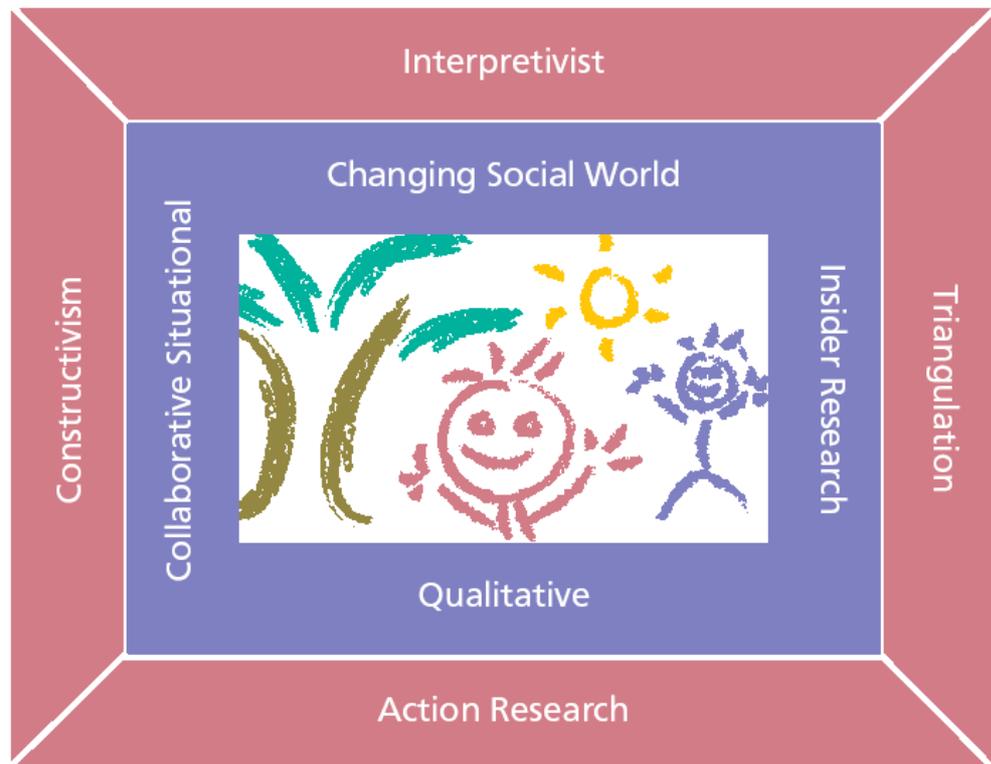
Fig 1.3 My research frame

1.4 Finding a research approach – qualitative research

Having established my paradigm I needed to establish an approach that would lend itself to the type of knowledge I was looking to produce. I could have chosen a quantitative approach or a qualitative approach. A quantitative approach would

produce facts and figures but a qualitative approach would aim to show the meaning or significance of something to a particular group. (Hughes 2001 p52) A qualitative approach is concerned with the quality of the data produced rather than the quantity of data produced:

> *"Qualitative researchers generally aim to show something's meaning or significance to particular people or groups of people."* (Hughes 2001 p53)

I knew I wanted to improve practice which would involve actually doing something and effect change. I came to the research with a strong feeling that a qualitative approach was going to be appropriate:

> *" a qualitative researcher doesn't seek to learn more about the topic itself, but about how people understand and make sense of the topic"*
> (Hughes 2001 p53)

I found this a reassuring statement as I had always appreciated the value of the outdoors in teaching young children, but I did not claim to have extensive knowledge at the start of this study. I have since read widely and while I can claim to know considerably more than I did in the beginning, I found that much of what was written about outdoor education was not directly relevant to my interests. I had to search for diverse sources of literature and this was probably because I focussed on how children made sense of their environment rather than a focus on environmental education. My data took the shape of investigating the way children interacted with their surroundings, sometimes inside but mostly outside. Most of my observations were concerned with outdoor activities and the way practitioners used this environment to promote learning. Some observations came from the indoor setting because the boundaries between the two were blurred and often an activity inside affected play outside. My investigation took the form of finding the best way of using the outdoor environment to stimulate and motivate learning which met the developmental needs of individuals and groups of children. Practitioners and children could manipulate and change the setting to promote learning across the curriculum, using a holistic approach that included a strong sense of self esteem and personal responsibility. The three main elements which came together were the child, the curriculum and the outdoor environment. (see Fig 1.4)
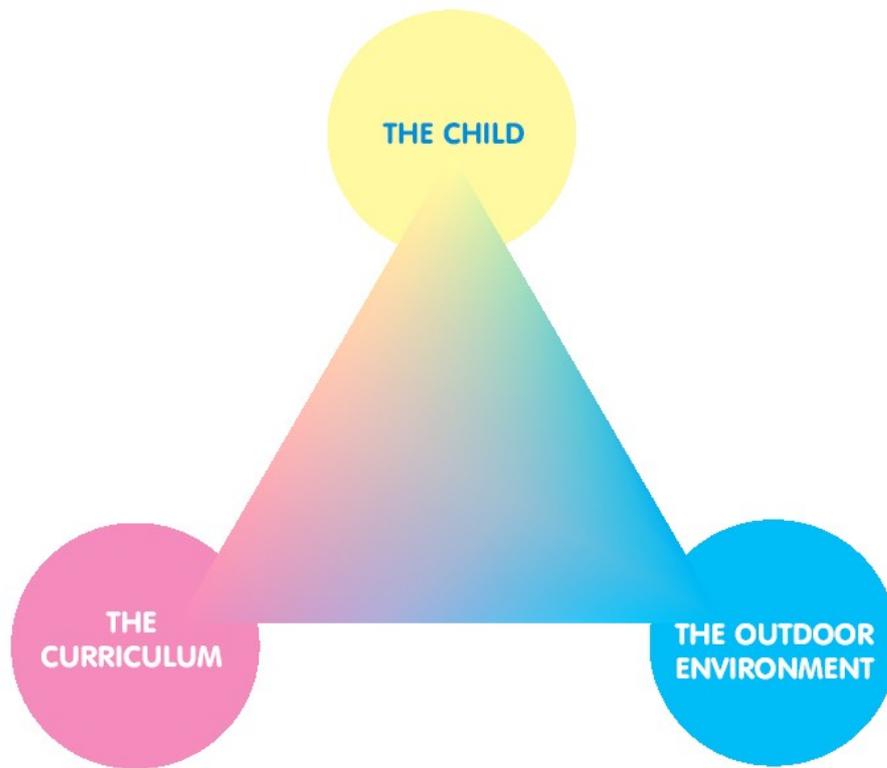
Fig 1.4 Three main strands which came together

My research did not take a 'top down' approach starting with a hypothesis (deductive research) but a 'bottom up' approach (inductive research) where data was collected first and then used to suggest a hypothesis. Qualitative research is not easily made orderly and organised and it is more likely to be messy and chaotic. The difficult task is to bring order to the chaos. The following example shows a garden drawn by some nursery children, representative of the setting, and added to the garden are some of the many variables which impacted on my research. (see Illustration 3)

Illustration 3 - Variables impacting on the research

As Edwards (2001) suggests, for qualitative research to be effective the researcher needs to be self critically aware and address certain key issues which include:

- reflection - for example, in analysing the data as an aid to making sense of a complex situation;
- validity and the way it is understood by different research paradigms.

I would also add power relations, in terms of being the researcher, to this list. I explore these issues in Chapter Five.

Denzin and Lincoln (1994 p2-10) describe five overlapping phases of qualitative research which have evolved over the past 100 years:

- *traditional, from about 1900-1940* - generally based on positivist views;
- *modernist 1940's -1970's* - still mostly positivist but breaks from this beginning to emerge;
- *blurred genres in the 1980's* - methodologies such as action research and case study began to be used with research beginning to make use of local knowledge;
- *a crisis of representation from the 1990's onwards* - the researcher's voice was more prominent and reflective with the researcher not being so separate from the enquiry;
- *looking forward, postmodern or present moments, looking to emergent features* - attempting to tell the stories of the field.

The last two points include critical interpretation which places the subjectivity of the researcher, as a writer, at the centre of the research. I saw that my approach as an action researcher and as an insider researcher, using my voice to reflect on the data and to tell the story of outdoor learning in my setting, made me a qualitative researcher. Denzin and Lincoln went on to list some of the methods used to collect information for qualitative research including: personal experience, interview, observational, historical and interactional. These were all ways of describing routine and problematic moments and meanings in the lives of individuals and I could identify with all of these as being useful tools which matched with my epistemological understandings.

By undertaking this research I felt as though I was playing a long game of "pass the parcel" in which each time the music stopped I took off a layer to see what

was underneath. The initial layers happened in the nursery outdoor play area, observing how children interacted with their environment. The following layers moved to look at the relationship between the indoor and outdoor environment which had many factors in common such as time, space, resources, needs of individual children, parents and the practitioners in the setting. The next layers focussed on the position of a nursery within a school and within national constraints imposed by the Foundation Stage curriculum feeding into the National Literacy and Numeracy strategies, with implications for teaching and learning. Other layers included advice from the inspectorate with their expectations of what made a 'good nursery' and the pressures from OFSTED to perform. Each layer was influenced by the early years curriculum which, having undergone a number of changes, finally ended up as the Early Years Foundation Stage in 2008. (see Fig 1.5)

LAYERS OF PASS THE PARCEL
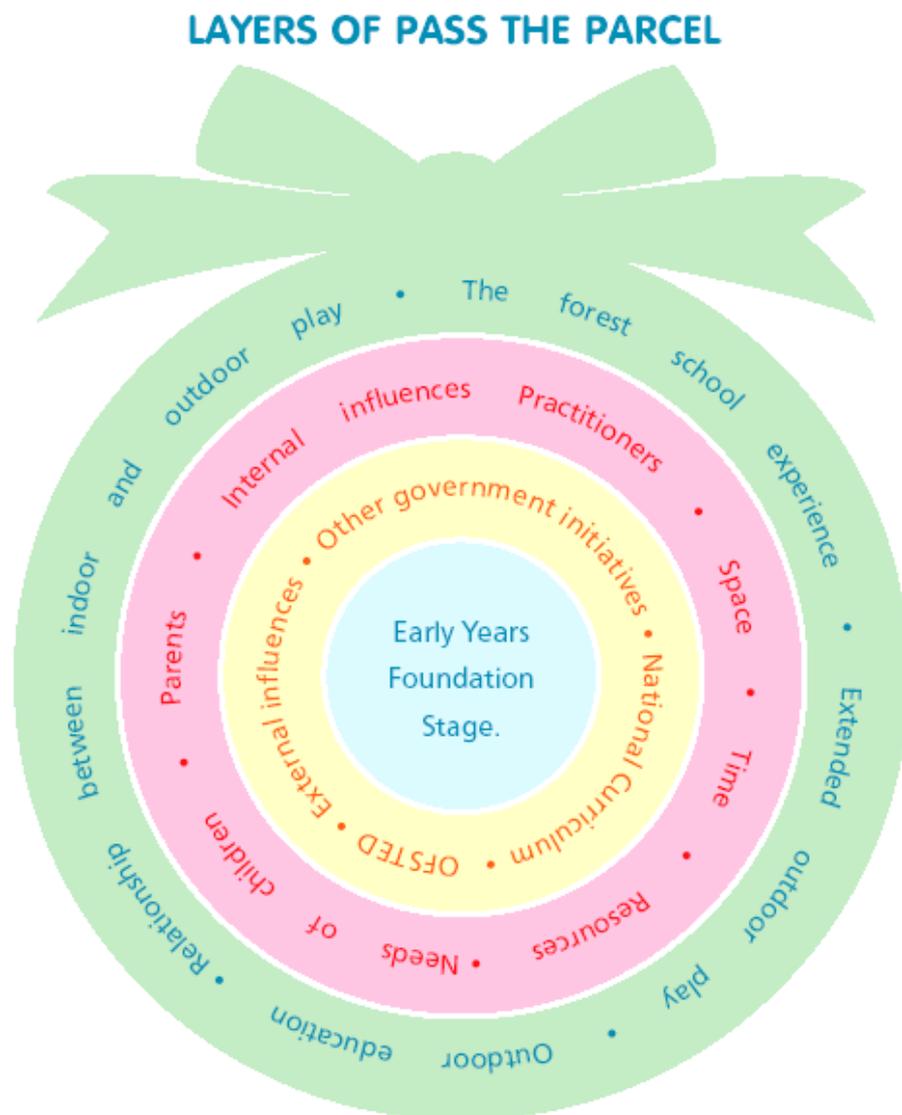
<div align="center">**Fig 1.5 Pass the parcel**</div>

By unwrapping each layer I have gradually uncovered cycles of action research. As changes have been made and reflected upon within the different layers I have been able to piece together good practice in outdoor education. (see Fig 1.5a)

HOW THE 'PASS THE PARCEL' DIAGRAM RELATES TO THE ACTION RESEARCH PROCESS:

Observe how children interact in the outdoor environment

Changes are made in light of the observations.
How can we please everyone?

Observe the needs of the individual

Beyond the setting, what are the external pressures, e.g. inspectors view of what makes a good nursery?

How did the children's interactions involve: Practitioners / Time / Space / Resources?

Top down pressure puts constraints on the action.

Taking action to meet the child's needs within the constraints of Time / Space / Resources.

How were the curriculum requirements met?

<div align="center">**Fig 1.5a Relating pass the parcel to the action research process**</div>

In 'pass the parcel' as each layer is removed the parcel gets smaller until the last person gets a prize. However in this case it opened up new areas of thought, making each layer a little wider than the last. As Green (1990) said about her personal approach to action research:

"I never actually solved problems but that it was more a question of revealing and coming to understand increasing layers of complexity." (Green 1990)

I began with a small local investigation based on teaching the children in my setting and I suddenly found myself questioning who wrote the foundation stage curriculum and for what purpose? I considered how much information practitioners, head teachers, advisors and inspectors had about the purpose of the curriculum and where they got this information from? Were the people delivering the curriculum expected to use informed professional judgements based on knowledge and reflective practice or did they lack the power to use these skills because a prescriptive curriculum was in place? Did the advice from the local authority inspectorate and advisory service reflect the best way for children to learn? Were we, as educators, aware of the political nature of teaching early childhood education? These were not the type of questions teachers were encouraged to address on training courses which were delivered in a prescriptive manner. I do not believe that teaching can ever be value free but it is important for practitioners to be aware of the values they teach and how this reflects on culture and society. We are told through the EYFS curriculum that certain skills and information are valuable to our three and four year olds and that certain skills and information are more important to these young children than others. I was interested to know how this information was chosen and for what reason.

1.5 Developing my constructivist stance

Through my research journey I came to understand that 'learning to be a learner' was a skill to last a lifetime and without it some people may never reach their learning potential. It could be conceptualised in terms of cycles of learning, for example, each year as we grow older we become more confident, more interested, more skilled, more sociable and as we do, our complexity of understanding of knowledge and understanding of the world increases. As we grow older we have increased freedom to learn about the things which interest us and this reflects the constructivist view of learning. Children develop from a child-like way of thinking to an adult way of thinking, making meaning by following individual interests which have the effect of widening understanding about the things that interest us but at the same time limiting our learning in areas we choose not to study. An example of this is when children make choices about their exam subjects. This image of learning cycles gradually building up to be bigger and bigger over time mirrors the research cycles of the action research

approach which I have used as the methodology for this study. I expand on this in Chapter Five.

The concept of learning cycles building up (see Fig 1.6), matches Bruner's (1977) description of a spiral curriculum in which knowledge and skills are acquired by extending prior experiences involving a child re-visiting prior experiences and developing them further. My research seemed to spiral as it developed.

Earlier in this chapter I noted the similarities between me as a learner taking part in this research process and the learning process of the children in our setting. I then thought about the process I went through to gain new information which would support my research journey. For example, understanding concepts such as the different models of a learner and relating this to the curriculum, was all new knowledge to me. I considered how I made sense of these complicated concepts. On reflection I believe I had to read about them several times with gaps of time in between so that I could absorb the information. I wrote notes in the form of mind maps which stated key words that would each trigger a different set of information and I used arrows to link sections together. I thought about what I was reading in relation to the practical observations of children in my setting and in relation to my previous understanding of the early years' curriculum. I gradually uncovered a picture in my head of the different approaches to models of a learner relating to the curriculum and this gave me enough information to be critically reflective. Through this process I discovered that I was a constructivist and having established that I had a position, I wondered if it was important for teachers to be able to practise their own position or if a position should be imposed on practitioners to give national conformity. It is easier to understand this conflict of ideas about learning if we unravel where the interpretations might be coming from, Mac Naughton (2003 p10) identified the early childhood position on curriculum and related it to the interactions between nature and culture:

- *reforming through interaction between nature and culture;*
- *reforming society position;*
- *conforming to culture* or *behaviourism;* (I refer to this in Chapter Two)
- *conforming to nature* or *maturationism;* (I refer to this in Chapter Two)
- *transforming through culture and nature.* (I refer to this in Chapter Two)

My own position fits best within the *reforming through interaction between nature and culture* position. In Chapter Two, I discuss where I believe the present early years curriculum fits within these models.
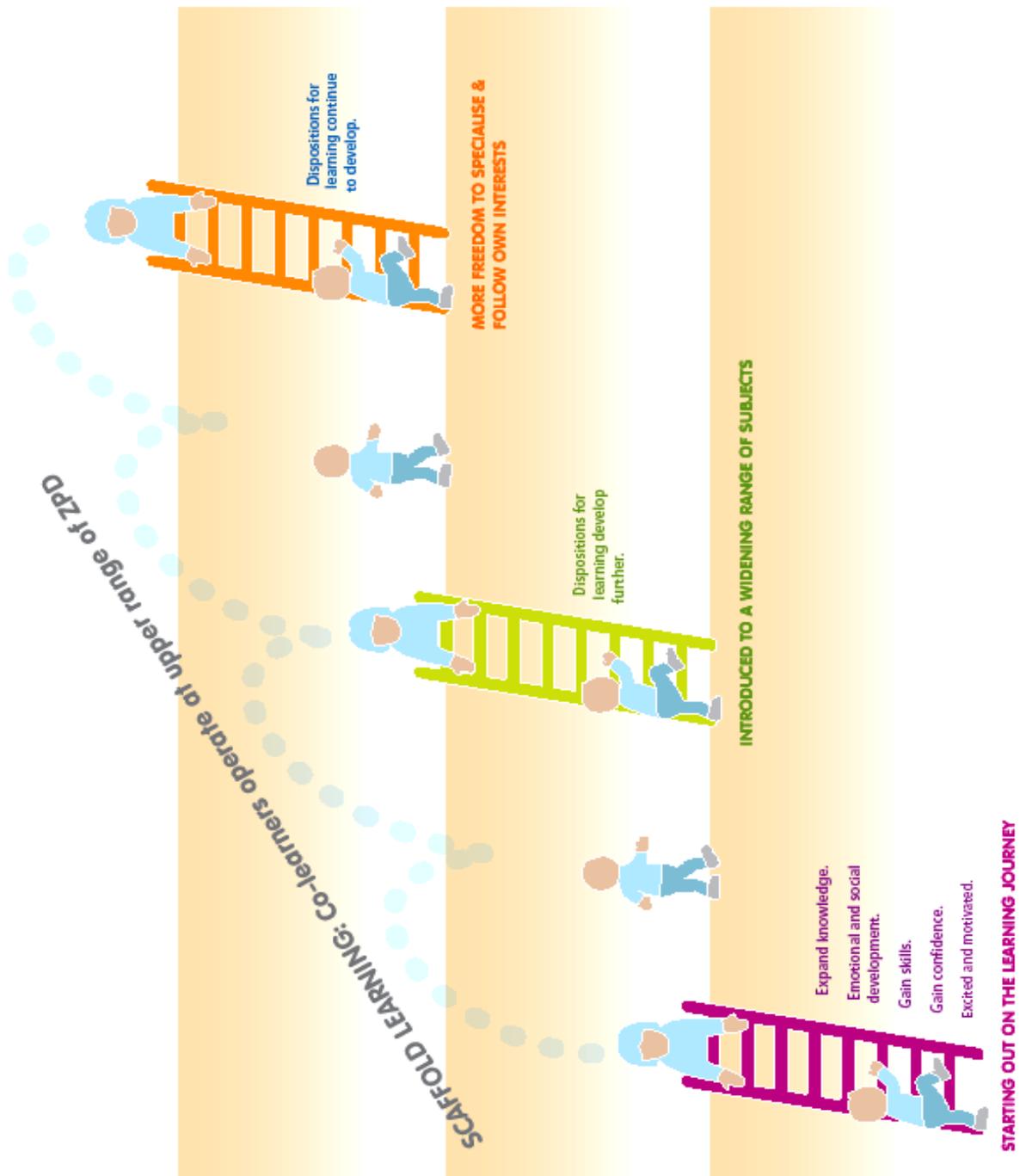
Fig 1.6 Ladders of learning

1.6 Reforming through interaction between nature and culture position of the learner

Mac Naughton (2003 p154) defined 'reforming' as improving something through change (like ways of thinking) which fits very well with an action research approach. Mac Naughton defined 'interaction' as the relations between things in which each influenced the other. This could be the relationship between a child's thinking and the environment. This definition matched well with my action research study because as well as making changes, I have also observed the interactions of children within their outdoor environment.

The reforming position originated from the European Enlightenment and the work of important figures including Rousseau (1762), Pestalozzi (1894) and Froebel (1826), who challenged the widely held view that children were born in sin. They advocated that education should begin as early as possible. Building on the work of these pioneers, Montessori (1916), McMillan (1919) and Dewey (1958) further developed the position and I refer to their impact in Chapter Three.

The reforming position advocates that education should produce a rational individual, capable of independent thought and self discipline and reflects a child centred approach:

> *"with an emphasis on self realisation, autonomy, individual growth and development, in order to enable each child to achieve their full potential as a self–governing, rational being." (Mac Naughton 2003 p155)*

My research has been strongly influenced by the reforming tradition and the interaction between nature and culture position on the curriculum, particularly in the contexts of constructivism, neuroscience and psychodynamics. (see Fig 1.7)
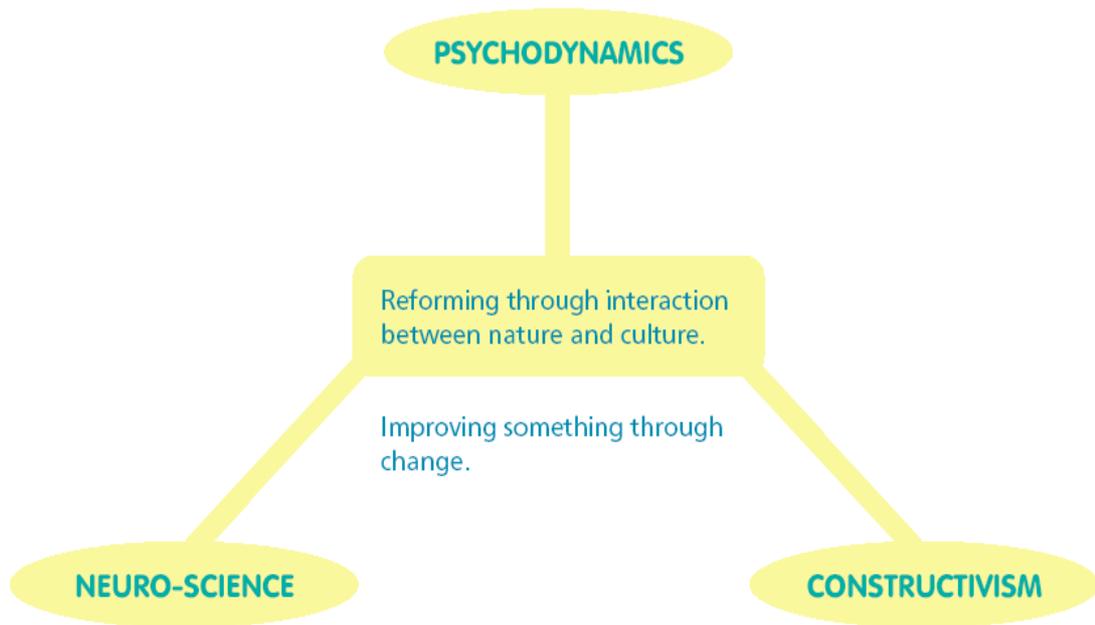
Fig 1.7 Reforming through the interaction between nature and culture

1.7 Constructivism

The position which best fits with my belief about how children learn and the one which I believe is best suited to the needs of outdoor play is the constructivist stance which involves a child building up new knowledge based on their existing knowledge and experience.

I discuss this further in Chapter Six when I explore ideas about schemas. Constructivist thinkers (Vygotsky 1934, Piaget 1929, Bruner 1915) see learners as active, not passive and problem solving as a process of active discovery is at the heart of the approach (see Fig 1.8):

> *"Children learn by doing in the real world with concrete objects.*
> *Children learn best when experiences are matched to and extend their current level of understanding and skill.*
> *The implications for teaching include providing materials that represent the real world to manipulate and explore.*
> *Child centred learning facilitated by the practitioner who stimulates thinking skills rather than rote learning.*
> *The child is a co-learner with the adult and is given time to explore.*

The role of the educator is to guide learning rather than passing on knowledge." (Mac Naughton 2003 P45)
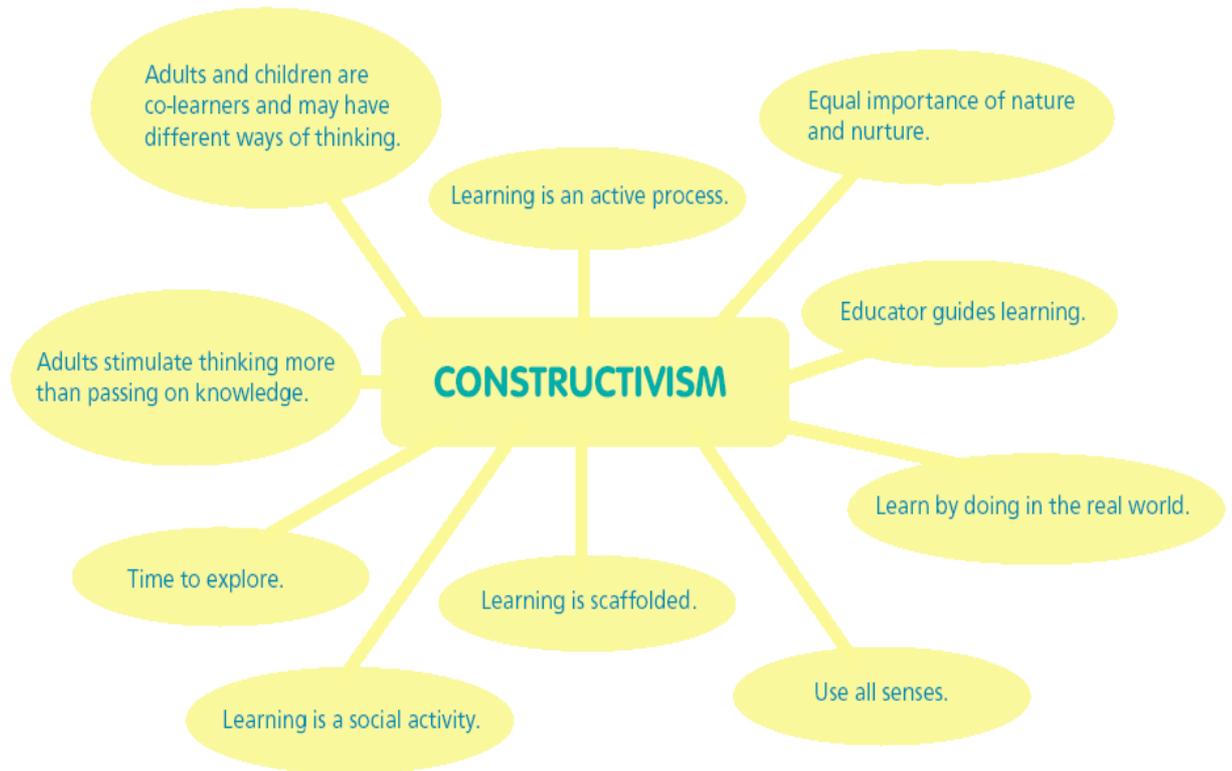
Fig 1.8 Model of the learner: reforming through interaction between nature and culture - constructivism

Once again I see the links between how children learn and myself as a researcher. My learning has come about through observing children in the real world and my level of understanding has been gradually stretched as I have been guided by the support I have received from the university. I have been a co-learner with the other practitioners in my setting. I have been constructing knowledge through first hand experiences, such as my visit to a Danish forest school and this has been expanded and developed by my reading. I originally wrote the above statement down before I visited a forest school in Denmark, on my return I re-read it and I was suddenly able to match visual experiences to all the elements within it. In Denmark, I had been freed from the constraints of the English curriculum and I found myself working with professionals who did guide

learning, who were co-learners with the child, who did facilitate learning in a child centred environment where the natural world was used by the child to manipulate and explore. My experience suddenly gave this writing a new and powerful meaning for me; instead of being a quote about a situation I could only imagine as being good practice, suddenly I had experienced it which made it a reality (see Fig 1.9):

> *"A child is able to grasp a problem, and visualize the goal it sets, at an early stage in his development; because the tasks of understanding and communication are essentially similar for the child and the adult, the child develops functional equivalents of concepts at an extremely early age, but the forms of thought that he uses in dealing with these tasks differ profoundly from the adult's in their composition, structure, and mode of operation."* (Vygotsky 1934 Ed. Koulin 1986 p102)

My own perception of knowledge is that it is not an external thing to be passed on to the child but something which should develop from the child's own understanding of a situation. For a constructivist knowledge is a matter of human interpretation and the role of the practitioner is to construct experiences which enable this to happen. One person's facts may be interpreted in a different way by another person which may account for some of the different interpretations of the early years curriculum.

Fig 1.9 Constructivism - the child and the researcher

1.8 The influence of Lev Vygotsky

Vygotsky's social constructivism has been a big influence on my understanding of how we construct knowledge and his theory first published in 1931 called History of the Development of Higher Mental Functions embraced all mental functions but

in particular his interest was in the development of language in relation to thought.

> *"Language and speech occupy a special place in Vygotsky's system because they play a double role. On one hand, they are a psychological tool that helps to form other mental functions; on the other hand, they are one of these functions, which means that they also undergo a cultural development. (*Koulin 1986 p256)

As my study developed I found Vygotsky's work particularly relevant because he explored issues of language and social interactions which became strong features of my observations:

> *"If language is as old as consciousness itself, and if language is a practical consciousness-for-others and, consequently, consciousness-for-myself, then not only one particular thought but all consciousness is connected with the development of the word."* (Vygotsky 1934)

Vygotsky was often referred to as a social constructivist, (see Fig 1.10) he talked about the importance of social development in the learning process. His beliefs were in line with the view that children learn in different ways at a time when many theorists were looking along a single track 'one size fits all' theory of learning. Therefore the actions of teachers (pedagogic styles) would need to embrace a range of styles. This implied that the role of the teacher needs to be creative rather than mechanistic, something which seems to have been eroded away in recent years. Vygotsky was a key social constructivist along with Bruner and Brofenbrenner, they emphasised the importance of a social environment for learning and the role o the family and community played in a child's learning before they started formal education (Garrick 2004). They emphasized the role of the adult in supporting (scaffolding) a child's learning within their zone of proximal development which I explain later in this chapter.

30

Development is bound by time (e.g. history).

Children construct their own understanding of their social world.

Children are not a burden.

SOCIAL CONSTRUCTIVIST

Child development is a cultural construction.

Children make social contributions.

Development is a problematic term.

Power issues arise.

Fig 1.10 Social constructivist

Vygotsky realised that learning did not just involve a teacher and a child but encompassed a range of social surroundings that connected the teacher to the child. The outdoor environment is such an important base for learning because it allows for creative teaching styles and embraces children's different learning styles. I found the outdoor environment offers a social base for learning to develop:

> "*Every function in the child's development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals.*" (Vygotsky Ed.1978 p57)

Vygotsky highlighted the importance of the role of the practitioner and I particularly like the phrase "creative art of a good teacher" as today so much teaching is down to delivering a curriculum. By being technicians rather than teachers (Revell 2005) we are in danger of losing the creative side of our role and it is the teacher's creativity in teaching which can become a powerful tool in how well a child learns:

"Vygotsky (Ed. 1978) stresses that children learn when they can make links with previous learning because then they can extend their existing conceptual mental map with new learning. Finding the mental "hooks" within children's previous learning schemes is the creative art of a good teacher. The new learning transforms the previous learning, creating new networks of understanding." (Wallace 2001 p7)

This describes the way concepts are established and developed. A concept is a changing understanding and as we gain new experiences our concepts develop and expand. Vygotsky identified the importance of the role of the adult in enabling a child to move on to the next stage in their learning. He identified the zone of proximal development (ZPD), the space in which an individual child is able to learn based on their own ability level and advocated that the adult should challenge and support the child and scaffold his or her learning, to enable the child to operate at the upper end of their ZPD. This is often cited as Vygotsky's most profound contribution to educational debate and his influence and his view of the role of expert others has been critical to my research and practice:

"actual developmental level as determined by independent problem solving and the higher level of potential development as determined through problem solving under guidance or in collaboration with more capable peers" (Vygotsky Ed.1978 p86)

Vygotsky was also instrumental in identifying the importance of young children being able to use all of their senses to explore the world and introduced the idea that what a child can do with the support of others, might be a better mental test than looking at what a child can do alone. Vygotsky was beginning to identify that different children had different styles of learning and a child may not reach his potential if these needs were not met. Therefore the learning process needed to be pitched just beyond the developmental level but within the ZPD to be most effective, in what was termed a higher plane of thinking:

"The intervention is at its most effective when it is contingent upon the child's existing repertoire of skills and knowledge that is when it is within the ZPD. When the child's level of understanding is deliberately challenged (but not challenged too much) then he or she is more likely to learn new things effectively without experiencing failure."
(Vygotsky in Smith and Cowie 1991 p354)

Imaginative play is seen as an excellent vehicle to support development through the ZPD as children can imagine themselves beyond what they could do in ordinary situations. Imaginative play easily allows children to talk to themselves about what they are doing which appears to support the learning process by verbalising thoughts. Vygotsky called this 'private speech' and felt it was a good indicator that the child was being challenged to work within the ZPD. According to Vygotsky, practitioners wanting to help a child achieve their potential have to be concerned about the role of spoken language, the social situation in which the learning takes place and the appropriateness of the task in relation to the child's ZPD. The role played by the adult in these learning situations works to provide 'scaffolding'. I would also argue that in order to work within the upper range of a child's ZPD a practitioner needs to have a good understanding of child development to make informed judgements. Through this study I have recognised the powerful opportunities the outdoor environment offers children to communicate in social situations with the support of informed practitioners:

> "Scaffolding involves staff using a variety of verbal and non-verbal general teaching techniques to identify children's current levels of competence in specific developmental domains and to challenge the children to move beyond their original level of competence."
> (Mac Naughton and Williams 2004 p336)

The idea of using imaginative play situations to assess a child and to demonstrate what they are potentially capable of achieving seems much more appropriate than ticking a list of pre-determined goals. I have observed many children who display high levels of imaginative play but who reflect badly on the ELG's test. It is disappointing to see data being used about a child that does not reflect their potential ability and this has been a continuing concern throughout the research.

1.9 The influence of Jean Piaget

Piaget has also been a key influence in my epistemological understanding particularly in relation to different kinds of thought (1959). Autistic thought which is subconscious. Directed thought, which is conscious. Egocentric thought, which comes from practical activity and later develops into social attitudes. Piaget believed that 'things' did not shape a child's mind. This conflicted with Vygotsky's view that in real situations when egocentric speech is connected to practical activities 'things' do shape a child's mind. I have been more influenced by Vygotsky's views as I have observed how children doing outdoor practical

activities engage in more co-operative work with others and operate at a higher level of thinking. When an adult models an activity for a child while giving a commentary about what is happening in order to develop their play and level of understanding it can be linked back to Vygotsky's ideas. Piaget advocated knowledge as interaction between subject and object, those external factors such as environmental factors and internal factors were of equal importance in the formation of knowledge. Piaget wanted to know how new knowledge was formed, which was why children became the ideal focus of his research. His work interests me particularly because he was interested in concept formation, the function of language and the evolution of logical thinking through stages of concrete experiences (Beard 1969). My observations have highlighted all of these issues. Although Piaget and Vygotsky came from the same position on curriculum issues in terms of 'reforming through interaction between nature and culture' they are seen as divided by their understanding of the importance of social interactions in learning. Piaget however did state that the social dimension was an important factor in learning even though Vygotsky is given most of the credit for promoting its importance:

> *"we believe that social life is a necessary condition for the development of logic. Thus we believe that social life transforms the very nature of the individual, making him pass from the autistic state to one involving personality. In speaking of co-operation, therefore, we understand a process that creates new realities and not a mere exchange between fully developed individuals."* (Piaget in Daniels 2001 p210)

1.10 Developmental stages of learning and how children construct their thinking

Piaget identified the child as the main person to direct learning with the adult becoming the guide and observing and assessing in relation to stages of cognitive development. (Garrick 2004) His developmental theory was instrumental in defining children by what they could not do, for example, pre-reading, pre-conservation of number, pre-operational stage and can be seen as a deficit theory. This negative attitude fostered by using words such as 'pre' to describe the stages that two to five year olds go through in their development is probably one of the factors contributing towards Piaget's unpopularity in recent years. Piaget investigated how a mature state of thinking evolved through enquiring into the history of intelligence from an evolutionary and a developmental perspective (Furth 1970). I am particularly interested in the developmental perspective as it

impacts on my validation process. When children talked to themselves about what they were doing, Piaget described it as an inability to take account of the perspective of others. This negative interpretation was later disputed by Vygotsky who as mentioned earlier saw a child's verbal thoughts as a vital step in the learning process. The constructivist approach suggests that children progress from a child like way of thinking to an adult way of thinking:

> "A child is able to grasp a problem, and to visualize the goal it sets, at an early stage in his development; because the tasks of understanding and communication are essentially similar for the child and the adult, the child develops functional equivalents of concepts at an extremely early age, but the forms of thought that he uses in dealing with these tasks differ profoundly from the adult's in their composition, structure and mode of operation." (Vygotsky 1934 Ed. Koulin 1986 p101)

It became important for me to consider issues around universal stages of development because my interpretations would impact on my validation process. The constructivist approach makes an assumption that a child's way of thinking (Piaget-child's thinking is emotional and context bound) is different from the adult's way of thinking (Piaget-adult is logical and abstract). This assumes that there is a common series of stages that we all pass through no matter where we are born. This is certainly true for some stages of development, for example a baby will usually learn to roll, then sit, then crawl before they can walk. However, common stages may not apply to all types of understanding and it is equally important to recognise that different cultures have different ways of thinking about the world. If a native tribe valued a spiritual way of thinking more than a desire to read and write along with all other aspects of what we understand as education, would this be a primitive way of thinking compared to ours or equal but different to us? How would we value it and would we see it as progress if the tribe changed its approach to our educational model? Have we devalued other ways of thinking by assuming universal theories? Who has the power to say what is culturally important to a given society? Piaget claimed that children were incapable of logical thought until about the age of seven but I would disagree and say that their thoughts are based on more limited life experiences so their conclusions may be different to those of adults but do not lack logic. There is evidence that the mistakes children make in reasoning may not be due to illogical thinking but to failures in memory or a misunderstanding of what adults want them to do. Margaret Donaldson suggests that if we wanted to see children at

their most competent we should observe how they engage in tasks they have set themselves not tasks set by psychologists:

> *"Children are not so limited in ability to reason deductively as Piaget-and others-have claimed. This ability shows itself most markedly in some aspects of their spontaneous behaviour and we have seen that it reveals itself with great clarity in the comments they make while listening to stories…… At least from age four, then, we must again acknowledge that the supposed gap between children and adults is less than many people have claimed."* (Donaldson. 1979 p58)

If practitioners are looking to provide meaningful learning experiences where thought processes can develop then surely our starting point should be based on what a child knows rather than what a child does not know. Within the concept of universal stages of development emerged a series of levels in line with the findings of Piaget and Bruner (see Appendix 3).

When Michael Shayer and Philip Adey were part of a team of academics conducting research into concepts in secondary science and maths in 1977 their main difficulty was to establish a benchmark of ability so they turned to Piaget for a developmental model. Piaget's model does differentiate different levels of complexity and if he had left it without adding age appropriate signposting I feel he may have sustained credibility with a wider range of theorists. Piaget advocated that children's thinking was context bound but adults thinking was abstract and logical. The aim was to move from the childlike way of thinking to the adult way of thinking. The stages of getting from one to the other were believed to be universal, irrespective of culture. Shayer and Adey's research focussed on the concrete to formal stage and they discovered that children were not as able as previously thought. They discovered that Piaget had only described the top twenty percent of the population because he had picked the best specimens on which to conduct his research. Therefore the results were weighted in favour of the most able children. They found an average eleven year old was a 2B (middle concrete) and not 3A (early formal) as Piaget had predicted. Shayer and Adey's work became validated around the world and was eventually used as the benchmark for the national curriculum. Shayer and Adey revisited their work in 2006 and tested over 10.000 children. The results showed that children in Year Seven (aged eleven and twelve) were now, on average, two to three years behind where they were fifteen years ago in terms of cognitive and conceptual

development. When Shayer was asked why he thought this had happened he speculated:

> *"There is no hard evidence. I would suggest that the most likely reasons are the lack of experiential play in primary schools, and the growth of the video game, TV culture. Both take away the kind of hands-on play that allows kids to experience how the world works in practice and to make informed judgements about abstract concepts."* (Shayer 2006 p3)

1.11 The social context of learning relating to concept development

Piaget saw the child as a solitary learner, a lone scientist testing out hypotheses based on their experiences whilst Vygotsky put learning into a social context and saw the child as a social learner valuing social interactions as part of the child's learning process. Piaget and Vygotsky both saw children as active learners. Vygotsky influenced my thinking because I observed the powerful impact of a social context on children's learning and did not observe children as isolated learners. Vygotsky believed in activity - generated thought and that language and thinking develop separately but relate to each other. Outdoor play can accommodate all these conditions for learning in a stress free setting. If children need to be actively constructing knowledge, then the outdoor environment offers ideal opportunities:

> *"As Sylva (1995) has suggested, we must recognise that in the past 20 years we have seen a major theoretical shift away from the study of the child as a solitary learner (Piaget) to the child as a learner in social context (Vygotsky), and narrative and ethnographic research now offer an exciting new vein of early years research."*
> (Mac Naughton, Rolfe and Siraj-Blatchford 2001 p206)

1.12 The influence of Jerome Bruner

Bruner expanded on the work of Piaget and Vygotsky by extending the way scaffolding was used to support the learner. Bruner (1977) looked at the way children helped each other to develop and called it peer tutoring which came from his model of scaffolding learning by using more expert others. The more expert others could be peers, where one child was slightly more expert than the other, working together within their zone of proximal development and learning occurring when this joint intellectual activity becomes internalized. I found Bruner's work particularly helpful in understanding my observations of children

observing each other and in working together on group activities over a period of time. Bruner introduced the idea of the spiral curriculum where children were meeting the same concepts at increasingly sophisticated levels by revisiting them. I observed this in my setting when children were engaged in play activities which developed over time and the *"knowledge arises out of a process of deepening understanding."* (Smith and Cowie 1988 p356)

Bruner stressed that learning should be an active problem solving process, he found the ZPD fitted well with his concept of the spiral curriculum:

> *"Imagine the tutor has erected scaffolding which could help the child to climb to a higher level of understanding. To be more effective, scaffolding has to be constructed so that the child is not asked to climb too much at once. It has to take account not only of the child's existing level, but of how far she can progress with help; essentially the idea of Vygotsky's ZPD."* (Bruner Ed. Smith and Cowie 1988 p357)

Bruner identified some key features of the scaffolding role of the adult:

- *recruitment* - to engage the interest of the child;

- *reduction of degrees of freedom* - simplify the task to make it achievable;

- *direction maintenance* - motivate the child, include positive feedback;

- *marking critical features*- highlight features of the task which are relevant;

- *demonstration* - modelling solutions with an aim for the child to imitate it back in a better form.

These have all been important aspects of my research because I have observed practitioners engaged in them when working outside. Bruner suggested that teachers were not handing on knowledge but actively recreating distinctive ways of thinking. I discuss the role of the practitioner further in Chapters Two and Four. Bruner set out three stages of learning:

- enactive, where information is stored according to physical movements - this stage is approximately up to one year;
- iconic, where information is stored using images often based on sensory experiences – this stage is approximately from one to seven years;

- symbolic, where everything cannot be pictured so language, numbers, symbols etc. are used – this stage is approximately from seven years onwards.

The EYFS curriculum encourages a sensory approach to learning and the outdoor environment is abundant in opportunities for this to happen.

1.13 The influence of neuroscience

Neuroscience (see Fig 1.11) has been influential because it focussed on critical and sensory periods for learning and development. I also found the focus on the importance of a stress free environment for learning matched my findings on the benefits of using the outdoor setting. I have been influenced by the work of Hubel and Wiesel (1965) who more recently gave scientific validation to Vygotsky's work. They studied how nerve pathways worked and changed in the early years of life, looking at specific windows of time when connections were made, particularly in the first six years of life. They experimented with kittens and discovered when they were deprived of specific movement experiences during a critical stage they were permanently damaged because the brain cells had missed the time to become activated.
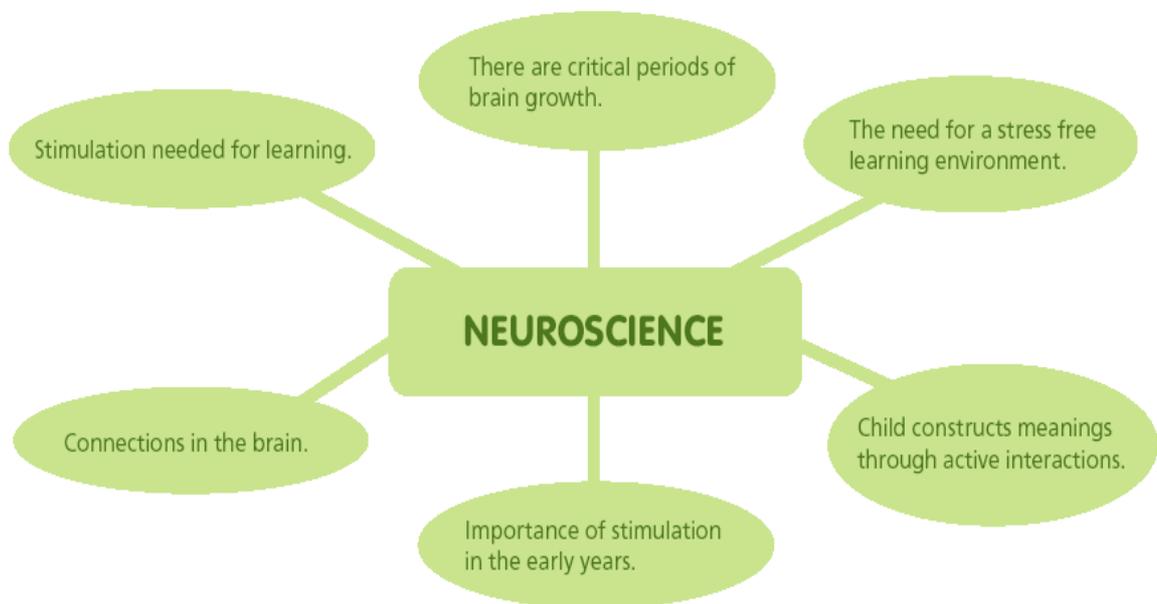
Fig 1.11 Additional model of the learner: reforming through interaction between nature and culture - neuroscience

Recent work in neuroscience endorses Vygotsky's ideas:

> *"The existence of sensitive periods for all subjects of instruction is fully supported by the data of our studies. The school years as a whole are the optimal period for instruction in operations that require awareness and deliberate control: instruction in these operations maximally furthers the development of the higher psychological functions while they are maturing. This applies also to the development of the scientific concepts to which school instruction introduces the child." (*Vygotsky 1934 in Ed. Koulin 1986 p190)

Christine Pascal (1999) cited the case of forty Romanian orphans who were cooped up in cots with very basic care until they were adopted at about nine months. Despite being given lots of stimulation and attention by their new families, each one of them had learning difficulties. The critical moment for learning had been missed. It would of course be dangerous to assume that if a child was denied quality care at a critical time then they were a lost cause, but it may be true that these children would never be able to achieve their full potential.

Bruce (2001) gives an example of a critical period as being the development of binocular vision which takes place only in the first three months of life and another example of a sensitive period would be learning to walk and talk. A critical period is similar to a sensitive period but sensitive periods tend to have a longer time span so the window of opportunity lasts longer. Children learn by using all of their senses and through movement. They need a long childhood to allow their brains to develop and it cannot develop without interaction with people:

> *"Learning deepens where there is care and nurture of the learner; the word means different things to different people. An approach which emphasizes learning outcomes and targets sees the products of learning as more important than the journey towards knowing and understanding, neither understands feelings and relationships, nor considers the cultural context as central to the intellectual life of the child."* (Bruce 2004 p29)

I would argue that some of the pressures early years settings have felt in recent years stem from this clash of values in relation to learning. I have come to

understand that feelings, relationships and cultural context are more important to a learner than outcomes and targets. Neuroscience recognises the early years as a unique opportunity when brains are developing and the IQ can gain or lose up to twenty points. Mac Naughton (2003 p64) identifies key ideas from neuroscience:

- *children learn through the stimulation of neural pathways;*
- *children learn best when there are non-stressful and positive relationships;*
- *children learn best when stimulation links with "critical periods" of brain growth.*

Neuroscience has highlighted the importance of stimulation of the brain in the early years in a stress free environment where children can construct their own meanings through active interactions. I was surprised by the emphasis on the importance of reducing stress, at all levels, including the organisation of space, interactions with adults, materials used and the organisation of time. I was expecting the stimulation of the brain at critical times to be prominent but I had not realised the extent to which stress could cause such negative effects. I experienced an environment which reduced stress when I visited a forest school in Denmark in which the furniture and décor was very natural, the building was laid out more like a home than a nursery, including a kitchen area which opened on to the main room. Tea-light candles were lit and placed on tables, fairy lights were draped around branches hung against the wall. The practitioners interacted with the children in a friendly, caring and supportive manner; children were not singled out to answer questions or put on the spot in front of others. The nurture ethos came over as a stress free method of supporting learning. The outdoor environment is the best place for reducing stress and I discuss this further in Chapter Four.

1.14 The influence of psychodynamics
Psychodynamics (see Fig 1.12) has also been influential to me through its child centred, free play approach combined with its strong focus on the emotional development of the child. Erik Erikson (1950) was one of the people who focussed on the idea that children learn best when they can have positive experiences to resolve conflicts e.g. using the home corner to resolve issues concerned with the arrival of a new baby. In the outdoor environment children

constantly play out experiences and resolve conflicts, demonstrating problem solving skills and higher level thinking.

Fig 1.12 Additional model of the learner: reforming through interaction between nature and culture - psychodynamics

1.15 The development of language and thinking skills in the construction of knowledge

While looking for an answer to the mystery of how children think and learn, language is a particular focus for attention. The way children communicated while outside became of significance to me as this study developed. By listening to a child's language, including the use of questioning, we can begin to unravel how or what a child is thinking. Vygotsky was clear about the role of language and its function:

> *"The primary function of speech in both children and adults, is communication for social contact. The earliest speech of the child is therefore essentially social."* (Vygotsky 1934 Ed. Koulin 1986 p34)

The Curriculum Guidance for the FS highlighted the need to provide a climate for using talk for thinking. (GB/SCAA 2000) The place of spoken language was

strengthened further in the EYFS curriculum. Chomsky's (1980) nativist theory, that humans are born with a special biological brain mechanism, called a language acquisition device (LAD) took the stance that nature is more important than nurture because the LAD is pre-set but experiences activate it. This firmly set human beings apart from other mammals. Chomsky demonstrated the complexity of learning language as opposed to a behaviourist stance in which imitation and reward were enough to develop it. He later expanded his theory to include the idea that universal grammar was present in the brains of children which allowed them to deduce the structure of their native language from mere exposure. Unlike Vygotsky, Chomsky did not really take thought processes into account in language development.

Lenneberg (1967) coming from the same theoretical group as Chomsky, believed in critical periods for language development. He believed if no language was learned by the age of twelve then it could never be fully learned. Children brought up without adult connections seem to prove this to be so, for example, the Japanese language does not contain distinct R and L sounds so Japanese people cannot distinguish between them but Japanese babies can detect the difference up to about the age of one. The brain is known to have sensitive periods when neural development leads to thought processes, connections happening that lead children to move forward in their thinking or cognitive development. As practitioners we can help to maximise these connections at the optimum time and this seems quite a responsibility:

> *"The history of language clearly shows that complex thinking with all its peculiarities is the very foundation of linguistic development."* (Vygotsky 1934 Ed. Koulin 1986 p130)

Vygotsky understood that a child brought up in a verbal environment used the mechanisms of speech at an early age. He stated that at a later age the child reached the stage of socialization in their thinking allowing mature concepts to develop. Through observations in my setting, at our forest school experience, we have found children who were reluctant speakers in the indoor setting who would talk quite happily to practitioners outside:

> *"A child is able to grasp a problem, and visualize the goal it sets, at an early stage in his development; because the tasks of understanding and communication are essentially similar for the child and the adult, the child*

*develops functional equivalents of concepts at an extremely early age, but
the forms of thought that he uses in dealing with these tasks differ
profoundly from the adult's in their composition, structure, and mode of
operation."* (Vygotsky 1934 Ed. Koulin 1986 p102)

Chomsky's LAD required experiences to trigger the process into action, however
in the 1970's his theory was challenged. Instead of an LAD specific to language
and causing language development to leap ahead of other skills, John Macnamara
(1972 in Donaldson 1978) proposed that:

> *"children are able to learn language precisely because they have a
> relatively well-developed capacity for making sense of certain types of
> situation involving direct and immediate human interaction." (p36)*

Macnamara was advocating the importance of the environment and the
interactions of the child with the people around them as a crucial factor in the
acquisition of language. It is more likely that a child first makes sense of a
situation and then uses that information to help him understand what has been
said to him. This demonstrates the important interactions between language and
thinking skills and is in line with my findings. Dowling (2006) suggested that
although children's play may sometimes appear random and unconnected to the
planned objectives, the child's preoccupation may provide a thread of thought
that is woven through different activities. I expand on schemes of thought in
Chapter Six. Dowling suggested that when this happened and children were
motivated and challenged, the result was genuine intellectual growth, as opposed
to children simply knowing about things. This must be the point where those
brain connections are joining up.

1.16 Barriers to language caused by the learning environment

I was particularly interested in a research study by Tizard and Hughes (2nd Ed.
2002) on the use of language between mothers and daughters of middle class
and working class families. They found that a mother taking time to interact with
her child was more important than the mother's social status or ability. The
general perception was that children from working class backgrounds were
exposed to deficiencies in the language environment of the home and this in turn
had a knock on effect on their ability to achieve at school. In fact the outcomes
showed very little difference between the amount of language used by both
groups in the home. The research did however highlight different ways each

group of children interacted with their teacher at school. The working class children were much more monosyllabic in their response to questions from the teacher in comparison to the middle class group of girls. Therefore it appeared that children had the ability to use language in the setting but children from a working class background who entered school:

> *"hardly able to talk are almost always children who can talk perfectly well at home, but are initially too ill at ease to display the full range of their verbal skills when they enter school."* (Tizard and Hughes 2002 p131)

This information seemed important in searching for an understanding of how children learn. If by demonstrating poor language skills in the classroom, a child might be showing signs of stress due to the situation they find themselves in and if stress, as mentioned earlier, prevents the brain from making effective connections, this is a double barrier for some children to maximise their ability to achieve and a bonus for those children who are comfortable in this type of learning environment e.g. the middle class child. By demonstrating poor language skills in the classroom it is possible that the teacher will have expectations for the achievements of that child that are below their capabilities, in other words the child will not be functioning at the upper level of their ZPD. In Chapter Four, I discuss the positive effects of using the outdoor environment to reduce stress for learners. In our setting we have found some children are much more comfortable communicating in the outdoor environment than they are inside. Garrick (2004) considers an action research study by Nind (2001) which identified the special role of outdoor play as an effective context for children's talk to develop suggesting the adult should adopt an informal, conversational style while outdoors. The linguistic approach of teachers may make children feel threatened (Katz and Chard 1989) which strengthens the case for practitioners engaging in genuine dialogue rather than questioning and interrogating to check what a child knows.

1.17 Effective pre-school provision
Earlier in this chapter I referred to the EPPE project, (Effective Provision for Pre-School Education) a long term study of 3,000 children in Britain which focused on three to five year olds and studied them again at the end of Key Stage 1. It was of particular interest to me because it identified five areas that were especially important when working with children aged three to five years and all have been key areas in my study:

- *quality of adult-child interactions;*

- *staff knowledge and understanding of the curriculum;*

- *adult's skill in supporting children in resolving conflicts;*

- *helping parents to support children's learning at home;*

- *having a qualified trained teacher working with children in the pre-school setting for a substantial proportion of time and most importantly as the pedagogical leader. (GB/DfES 2003)*

The report identified the importance of the quality of adult-child verbal interactions and found that:

> *"…the most effective settings encourage sustained shared thinking which was most likely to occur when children were interacting 1:1 with an adult or single peer partner. It would appear that periods of sustained shared thinking are a necessary pre-requisite for the most effective early years practice."* (GB/ DFES 2003)

The final report in 2008 studied children in the project when they were ten and eleven years, it continued to endorse the earlier results. By highlighting the importance of the role of the practitioner, the quality of the verbal interactions and the organisation of the setting in order to maximise effective learning, we see the scaffolding of Vygotsky and the peer tutoring of Bruner still influencing good practice:

> *"Sustained, shared thinking occurs when two or more individuals work together in an intellectual way to solve a problem, clarify a concept, evaluate an activity, extend a narrative, etc. Both parties must contribute to the thinking and it must develop and extend the understanding".*
> (EPPE Project GB/DFES 1997)

The project began by comparing the outcomes of different kinds of early years settings, when Labour came to power in 1997 promising to expand nursery provision the team took the opportunity to expand the research to include the impact of provision on deprivation, and to put more emphasis on social, emotional and motivational outcomes as well as looking at the influence the family had on the child:

"Those with high quality pre-school intervention are still overcoming the poor educational and social trajectories normally associated with deprivation, and outperforming their peers." (EPPE 2006)

Sylva (2006), who took part in the EPPE project, was most surprised by the impact of the setting on the whole child. She had expected education focussed settings to produce the best educational outcomes, while care focussed settings would socialise children best, but in fact an emphasis on care did not dilute education. While high quality education had a highly positive social, behavioural and motivational impact on the child, the two fed from each other. In my experience it is vital to get the social and emotional development right if a child is going to achieve in other areas and my research suggests that children engaged in outdoor education have excellent opportunities to develop these areas.

1.18 The role of the outdoor environment in developing thinking skills

Children use thinking skills in different ways to plan and predict, speculate, find solutions, work things out, solve problems, reason, explain, make connections, observe cause and effect, imagine, explore, empathise, reflect and recall. By making choices and decisions, children are forced to think for themselves. In Reggio Emilia pre-school settings in Italy the environment is referred to as the third teacher (Garrick 2004) and this phrase reinforces the power of the environment to stimulate learning. In this country we have a tradition for nursery education incorporating periods of extended outdoor play with planned and unplanned activities. With the introduction of the FS and later the EYFS, planned outdoor play has regained a more significant role. The six areas of learning are expected to be covered in the outdoor environment just as they would be inside. A following trend has been to advocate free flow access for children between inside and outside, so the principle was established that the outdoor environment had suddenly gained a huge leap in status in the early years curriculum. Dowling (2006) said children need to be able to move, make and do things without disturbing others and to feel liberated by acting for themselves without being overseen by adults. Teachers also like to feel they can act for themselves without being constantly monitored and today they have less opportunity to experience acting on their own knowledge and instincts, they dare not move out of the box.

1.19 Reforming society position on the curriculum

I have discussed the three models of the learner referred to under the reforming through interaction between nature and culture position on the curriculum – constructivism, neuroscience, and psychodynamics. Finally in this chapter I want to introduce another position on the curriculum which has reforming links - the reforming society position on the curriculum. (see Fig 1.13) I refer to this position now because it sits within the reforming tradition and has close links to the constructivist stance. There are also strong indications that some of the EYFS document has its roots in this position which is organic and changes to meet the needs of the individual. As well as being child centred, it is holistic and flexible. Planning is changed to meet the individual child's needs rather than to meet the needs of group objectives. The concept of free flow between the indoor and outdoor environment comes from this curriculum position.

> *"A reforming society position on early childhood rests on the belief that education can and should produce a rational individual capable of independent thought and self discipline- often referred to as the self-governing child. The focus is therefore, child-centred with an emphasis on self realization, autonomy, individual growth and development, in order to enable each child to achieve their full potential as a self governing, rational being."* (Mac Naughton 2003 p155)

This curriculum position states that the content should match the individual child's developmental needs and interests, promoting free thinking in a just society. A key thinker in the reforming position on the curriculum was John Dewey (1961). In this approach, observation forms a foundation for decisions made about the curriculum. Children are observed to give a deeper insight into knowing the child, observation helping to uncover what a child knows about the world. Therefore the child's own perspective is brought into the picture and this gives the child some status and power over how the curriculum develops. The aim is for a shared and equitable state of justice between the child and the practitioner over the curriculum. This curriculum stance seems to match my understanding of early years settings in the 1970's but it is far removed from the FS curriculum of 2000 in which the child was given little control over the curriculum and in which the language in the guidance document focussed on how the practitioner was to plan for the child. (GB/SCAA 2000)
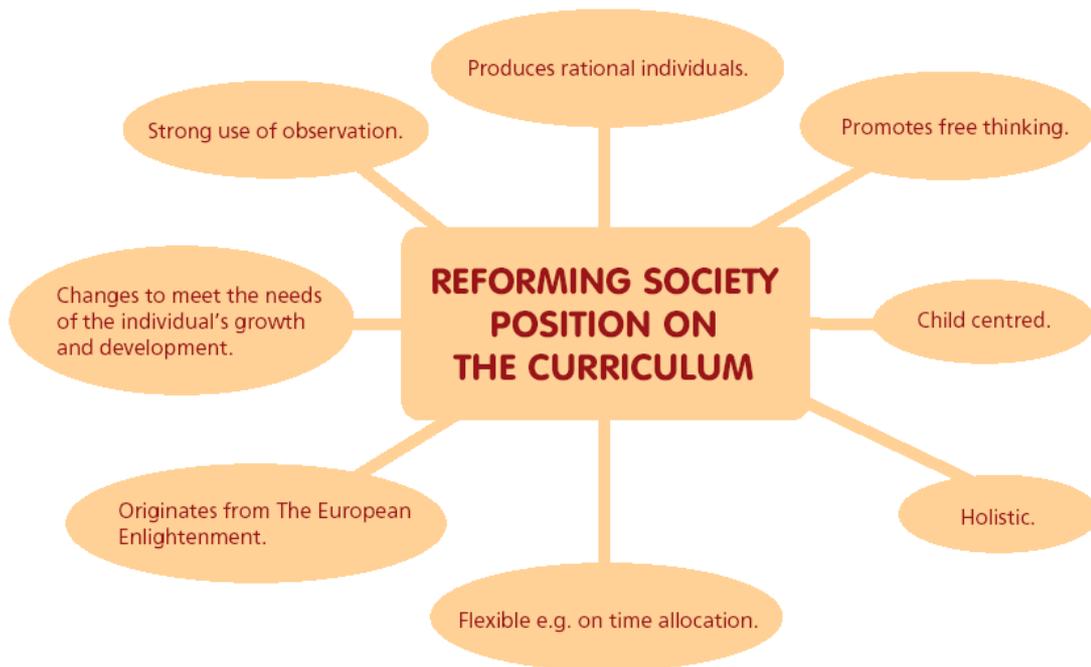
Fig 1.13 Reforming society position on the curriculum

1.20 Summary

In this chapter I have considered my own learning and how I have gained knowledge as a researcher discovering that I went through exactly the same process as the children I was observing. The constructivist approach was just as relevant to my learning as it was to the children I taught. I have located my research in an interpretivist paradigm taking a qualitative approach based on my own epistemological stance. I have established that my constructivist stance fits within the reforming position on the curriculum. I have introduced some of the prominent people who influenced my thinking on how children learn and related their ideas to my own experiences. This chapter has linked to my first theme – *Children's Learning*. The outcome of this theme has led me to understand the impact of learning dispositions for children's outcomes by exploring the theory and the practice. By exploring the theory behind different positions on the curriculum I gained a better understanding of the importance of learning dispositions discussed in Chapter Three and Six. I have established my commitment to the use of the outdoor environment as a context in which to maximise children's learning based on constructivist principles and I have demonstrated that a constructivist approach would give children the tools to become lifelong learners. I continue this discussion in Chapter Three.

Chapter Two

The Learning Context – Policy and Practice

In this chapter, I highlight the major changes in the early years curriculum which have taken place over the past ten years and shaped early years education in this country. I also explore some models of the curriculum, based on differing approaches, relating these to my own experience as a practitioner and researcher. Mac Naughton (2003) has been particularly helpful and influential in the development of my thinking. I show how particular models of the learner have influenced curriculum developments, exploring some of the tensions which exist between the two. By highlighting existing tensions I investigate issues of power and how different power relations impact on early years practice. This includes the balance of power between myself as a researcher and the children I teach, as well as the way practitioners in our setting attempt to empower the children through the use of the outdoor environment.

Work in this chapter links to my second theme - *The Impact of National Policy*. This includes my experiences of the power of being a teacher researcher and how this helped myself and my team overcome some of the pressures involved in implementing national and local policy. It also enabled us to make positive decisions about the way we delivered the curriculum.

2.1 The early years curriculum

In the UK, unlike many other countries, we have had a tradition of separating the education from the care of children and I would argue that this explains why it has been so difficult to introduce a curriculum which adequately meets the needs of children in all early years settings. Each setting, whether it is in the voluntary sector such as a playgroup; a day nursery funded by the private sector; or an education nursery funded by government; have a different history in terms of management, funding, access and development. A nursery attached to a school is rather like a microcosm of the main school, often with a separate building and garden. Administration, admissions, managing of practitioners and students, partnership with parents, planning and delivering the curriculum, linking with the main school and linking with outside agencies, all come under the role of the teacher in charge. Pollard and Tann (1987) in Bilton (1998) argue that management is the action part of the reflective teaching style and that this management is part of the day to day running of the setting which includes every

learning situation and the managing of time, people and resources. Managing the setting has always been part of the role of the nursery teacher and it is this responsibility that has traditionally made the role different from that of other classroom teachers and has therefore been acknowledged by payment of additional points on the pay scale. The nursery is often the first impression a family has of a school. When I moved from Key Stage One (known then as the Infant Department) into the nursery in 1988 there was no written curriculum to follow, no policy documents, no profile or goals, no national inspection or performance management. When a child left the nursery we filled in a simple tick sheet of about twenty statements. When I look back at the list of documentation that has been introduced since then, I wonder how we possibly managed to teach children without them! Was it really that easy or difficult, similar or different to the way we teach today?

In 1996 the Desirable Learning Outcomes for children on entering compulsory education was introduced and this set out the six areas of learning that children should cover in a maintained nursery:

- Personal Social and Emotional;

- Communication Language and Literacy;

- Mathematics;

- Knowledge and Understanding of the World;

- Creative;

- Physical.

The emphasis began to move towards direct teaching and academic skills. In 2000 the Early Learning Goals were introduced as part of a Foundation Stage curriculum. The six areas of learning remained but the emphasis changed to include a balance of child initiated, teacher initiated and child supported activities. This curriculum aimed to include all children from the age of three to the end of the reception year no matter what setting the child attended. This was an attempt to bring all early years' settings into a common approach to delivering a national curriculum for pre-school children so that when children arrived in school they would have been exposed to similar experiences wherever they had accessed their pre-school entitlement. Alongside this curriculum, the government set standards of care for children under the age of three - Birth to Three Matters (2002). In September 2007 both documents were brought together along with

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national standards for daycare and they were all incorporated into the Early Years Foundation Stage which came into place in September 2008. This forms the statutory requirement for all children from birth to the end of the academic year in which they become five. Ruth Pimentel the National Director of the Foundation Stage has said:

> *"Let's make no mistake – the introduction of the EYFS is momentous. It marks an explicit commitment in legislation stipulating what local authorities should be doing to support our youngest children. It is a recognition that if we get it right for all young people between birth and five then we are laying down educational and emotional fundamentals that will help them throughout their lives."* (Pimenten 2007 p31)

2.2 Missed opportunities

In 2000 when the FS was first introduced, the government held an inquiry into learning in the early years. The inquiry produced an excellent report which summarised brain development research, cognitive development of pre-school children and comparative studies of pre-school children in different parts of the world. Under the section on cognitive development the report covered some of the key issues in the learning process including:

- sensory development;

- understanding the physical world;

- understanding emotions;

- development of language;

- learning to read and write;

- development of numeracy.

This section of the report concluded that:

> *"Developmental psychology research has demonstrated that children's main sensory and cognitive learning achievements come from their own experiences in the course of activities such as play, exploration, everyday talk and social interaction with peers and siblings."* (POST 140. 2000)

The information in this report must have been available to the authors of the FS curriculum and I believe they did attempt to take it into account, but in reality the curriculum was hijacked by the literacy and numeracy strategy which

explains why early years teachers were pushed by the inspectorate to instigate formal structured teaching of phonics, numbers, hand writing and basic skills with three and four year olds rather than implement the practice advocated above.

Under the heading of "comparative education studies" the report highlighted that summer born children did better on later tests of academic achievement if their entry to school was delayed (Sharp and Hudson 1997). In this country we have pushed our children into school at the age of four, sometimes just after their fourth birthday. It has taken another ten years before the government has finally asked for a review into whether children born in the summer should have a delayed school start date. In the USA and most European countries, more formal education begins at nearer seven and by the age of nine, children are working at the same level as our young starters; in Scandinavia the results are even better (Prais 1997). The analysis of USA programmes such as Head Start and High Scope showed these pre-school experiences had lasting, cost effective outcomes for the government. I experienced Head Start at first hand in 1980 whilst training. The House of Commons report concluded:

> *"In summary, pre-school programmes that emphasise self-initiated play and exploration provide children with space and toys with which to play, and do not teach academic subjects, seem to be worthwhile to children. Several studies found that the most successful programmes involve a high degree of parental involvement."* (Parliamentary Office of Science and Technology-POST 140. 2000)

The report went on to say:

> *"Skills such as reading and writing and maths require teaching, but there is no convincing evidence that teaching these skills early (before about six) is advantageous. International studies suggest that a later school starting age (age six or seven) might be beneficial, if school is preceded by high-quality pre-school provision. There is some evidence that pressuring young children to learn about letters or numbers in too formal a manner might be counter productive."* (Post 140. 2000)

The report suggested that at four or five years of age children are still developing the cognitive and social skills to facilitate learning from formal instruction, so it is more appropriate to focus on social interaction, play and exploration.

Six years later the Nottinghamshire Education Authority insisted that children across the county started school earlier, with just two intakes a year no later than the February half term and, at the same time, Nottingham City Council sought opinions on starting all four year olds at the start of the school year in which they became five. Nutbrown (1996) talks about the National Foundation for Educational Research (1994) analysis which showed four year olds in nursery settings did better than their comparable groups in school. Despite all the evidence the Rose Primary Curriculum Review interim report (December 2008) advocates summer born children start school in the September after their fourth birthday.

2.3 The Early Years Foundation Stage

Although the Post 140 (2000) report did not seem to have impacted on the FSC, its influence can be seen seven years later in the publication of the EYFS curriculum (GB/DFES 2007). The EYFS was part of the Children's Act 2006 and provided a means for services to be nationally assessed. It consisted of the statutory framework, principles into practice cards, practice guidance for the EYFS and a DVD resource for providers and practitioners. The six areas of learning remained:

- Physical;

- Personal, Social and Emotional;

- Creative;

- Knowledge and Understanding of the World;

- Communication Language and Literacy;

- Problem Solving, Reasoning and Numeracy.

The EYFS identifies four key principles (GB/DfES 2007 p9):

- *A unique child – this recognises that every child is a competent learner from birth who can be resilient, capable, confident and self assured. The commitments are focussed around development; inclusion; safety; and health and well being.*

- *Positive relationships describes how children learn to be strong and independent from a base of loving and secure relationships with parents*

and/or a key person. The commitments are focussed around respect; partnership with parents; supporting learning; and the role of the key person.

- ***Enabling Environments*** *explains that the environment plays a key role in supporting and extending children's development and learning. The commitments are based around observation, assessment and planning; support for every child; the learning environment; and the wider context-transitions, continuity, and multi-agency working.*

- ***Learning and Development*** *recognises that children develop and learn in different ways and at different rates, and that all area of learning and development are equally important and interconnected.*

As a practitioner I wondered if settings really would be judged on these principles. I feared that two areas of learning, language, especially phonics, and numeracy may still be given a higher priority when a setting was observed as has happened in the past. The government target for 2020 is to have at least 90% of children developing well across all areas of the EYFS profile by the age of five. (www.dcsf.gov.uk/publications/childrensplan)

The words look positive from a practitioner's point of view, for example:

> *"The EYFS sets standards to enable early years providers to reflect the rich and personalised experience that many parents give their children at home. Like parents, providers should deliver individualised learning, development and care that enhances the development of the children in their care and gives those children the best possible start in life."*
> (GB/ DFES 2007 p9)

Aspects of this curriculum are heartening to those of us who have seen many changes in early years' provision over the years. For example, in an article about the EYFS, Engel stated that play must underpin all aspects of delivery:

> *"Children learn through active engagement in experiences. The focus is firmly based on providing challenges indoors and outside in equal measure and ensuring that children have free-flow access to both locations for most of the day."* (Engel 2007 p15)

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Engel goes on to say that adults should help unlock learning for children and act as facilitators in children's continuous and progressive development. I feel practitioners working in educational settings have traditionally been good facilitators but in recent years they have felt this skill has been devalued, even ignored and certainly not celebrated, at the expense of formal teaching with groups of children. If the role of facilitator is to be placed at the centre of the practitioner's role this will be good news for staff and children. Whether or not this is a truly child friendly curriculum depends on how play is defined and I discuss the role of play in Chapter Three.

I find it problematic that there is a mismatch between what is said in the EYFS guidance and what is assessed at the end of the key stage through the ELG's. The two seem incompatible and I fear that once again practitioners may be torn between what they know to be in the best interests of their children and pressure from a top down approach to deliver targets. I am not alone in my concerns; the Open Eye campaign (www.savechildhood.org.uk) was set up to highlight the potentially damaging effects of the EYFS on early learning in England. Their concerns relate to contradictions, for instance 'the unique child' principle is undermined by the requirement for every child to acquire the ELG's by the end of the key stage. This makes a nonsense of children working at their own pace and following their own interests. The goals for Communication, Language and Literacy are unrealistic for all to achieve by the end of the key stage and:

> *"in other countries they wouldn't be expected to. There is a wealth of evidence that children taught to read and write at six or seven commonly achieve literacy competency quickly and easily and with greater enjoyment."* (Edgington, House & Oldfield 2007 p9)

In response to the concerns of the Open Eye group the Children's Minister Beverley Hughes said,

> *"We have the whole hearted backing of the vast majority of early years' specialists, who think that the EYFS fits with their flexible approach to learning. This is because it is a play based approach which allows children to learn and develop at their own pace."* (Hughes in Gaunt 2007 p6)

I wonder how she knew she had a vast majority backing the EYFS and I also wonder why she did not comment on what this vast majority thought of the sixty nine ELG's being left in the curriculum as an end judgement of the individual child

and of each setting. The Open Eye campaign is not against the EYFS but it does challenge the 'learning and development' goals and the assessment regime which audits them. Open Eye looked to change the 'compulsory' status for all children and all providers to the status of 'professional guidelines'. In response to the Open Eye campaign, the government maintained that the EYFS is a play based framework starting from the position that every child is unique and therefore learns and develops in different ways and at different rates:

> *"We are confident that the EYFS provides the foundation for securing children's educational development through primary school and beyond. It is essential if we are to close the achievement gap between disadvantaged children and others."* (Hughes 2008)
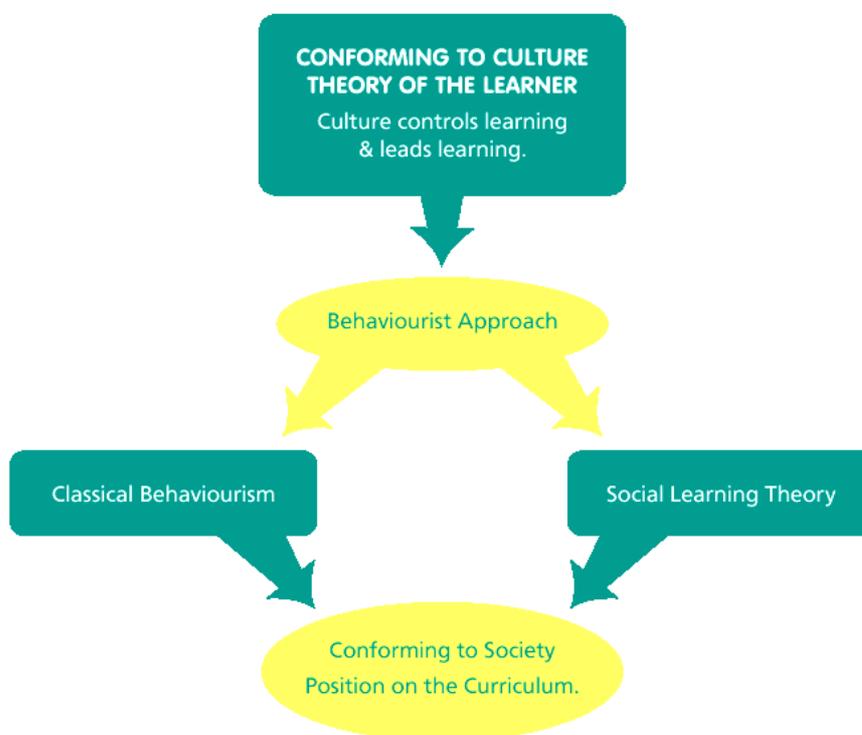
Fig 2.1 Conforming to culture theory of the learner leading to a conforming to society position on the curriculum

2.4 Alternative models of the learner and positions on the curriculum

I now move on to explore positions on the curriculum and how these derive from models of the learner. I relate them to the EY curriculum documents and review their implications for pre-school settings. The models I focus on in this chapter are:

- **conforming to culture model or behaviourism leading to a conforming to society position on the curriculum;**
- **conforming to nature model or maturationism;**
- **transforming model.**

I begin with focussing on the 'conforming to culture' model (see Fig 2.1) as I feel this has the strongest impact on our present early years curriculum and I relate this to my experiences of the FS curriculum. This model of the learner comes from a modernist view of society and a structuralist view of the child. The implications of this model are that within this position a government defines what national goals, beliefs, values and knowledge should be delivered through education. If the government wants a society that produces a skilled, sociable, creative workforce for the future then these will be the values reflected within the curriculum. Mac Naughton argues that a conforming to culture curriculum should be useful to society in meeting its future needs. This idea probably began to take shape with the arrival of the industrial revolution when a specific type of work force was needed to ensure industrial growth for this country.

> *"The best way to ensure that society can reproduce itself is to shape children by deliberately and effectively transmitting desired social values and knowledge to them through their education."*
> (Mac Naughton 2003 p124)

Conforming to culture models of the learner implies a teacher directed approach to learning, providing some clear tasks to maximize the child's learning and increase chances of success in life. This approach to education is strongly influenced by behaviourism (see Fig 2.2) and the idea that people of all ages learn in the same way (no multi-intelligences there then!) The child is refined to achieve pre-determined goals through directed learning but independence and confidence are also encouraged. Rewards and incentives play a strong role in the behaviourist approach and is seen in schools when stars, smiley faces, and special awards are used to reinforce positive behaviour. The adult is very much in charge of the learning programme and although the child may work on independent tasks, these tasks are part of a highly structured programme that involves rote learning and drill. The implications for teaching include having orderly learning materials which must be self correcting for the child as they work

at their own pace therefore showing the correct answer. With these materials there is a definite right and wrong way to use them. The educator sets clear goals for the child's learning within a step by step approach to reach those goals. (see Appendix 4) Behaviourist ideas led to the 1950's readiness perspectives where adults identified deficits that prevented readiness for future learning (Garrick 2004). This approach included direct instruction at the expense of wider opportunities across the curriculum.
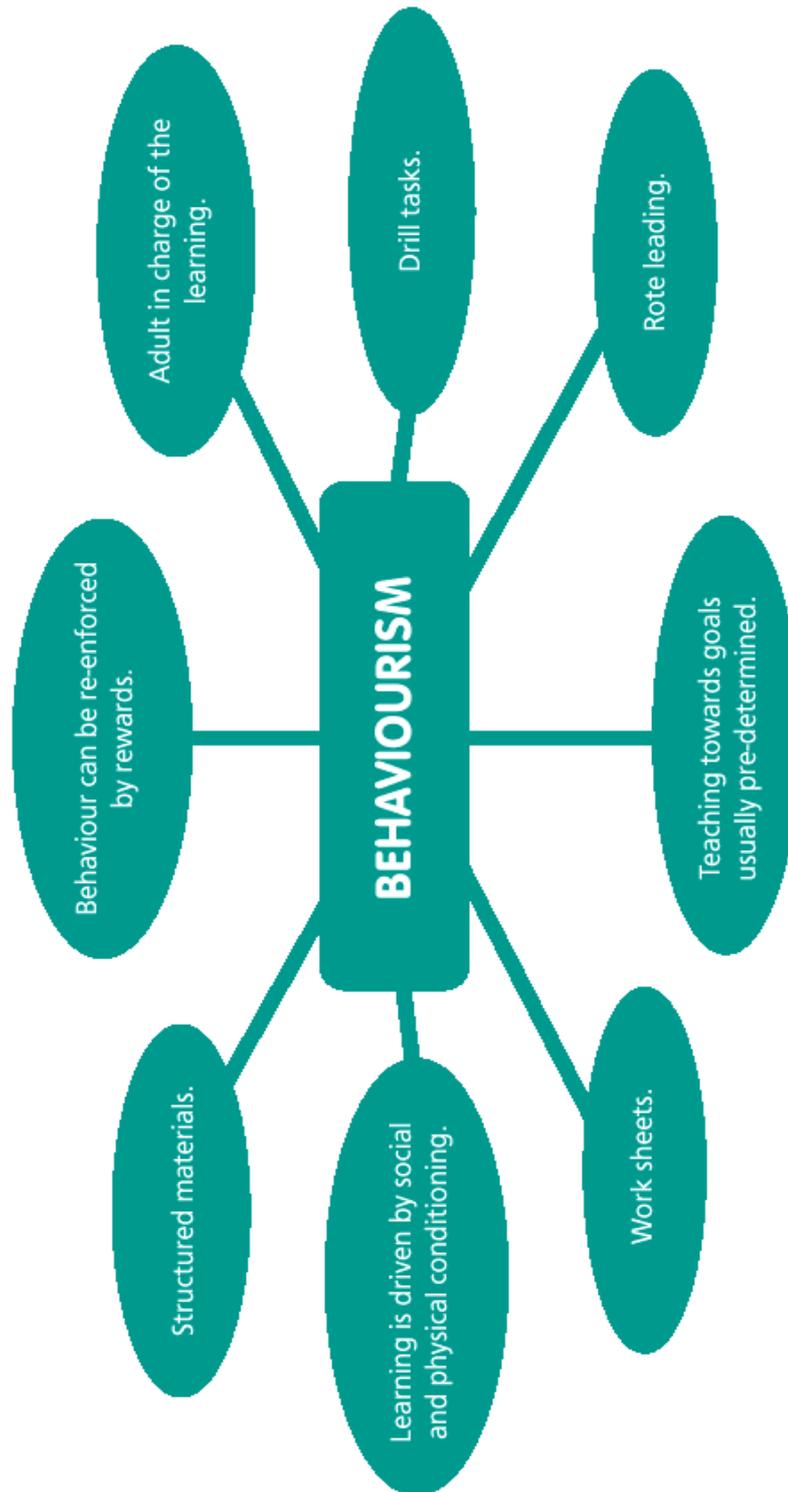
Fig 2.2 Behaviourism

The role of the adult is to strongly direct learning and the content of what is learned. In the FS Curriculum Guidance (GB/QCA 2000) the words 'well planned' are used eight times between pages 11 and 16. Feedback and advice from inspection reports given to my setting has often reflected the behaviourist approach to the early years curriculum. (see Appendix 5)

Mac Naughton (2003) illustrates this behaviourist approach by describing an educator using a bell or sound to tell children that an activity has finished and it is time to change to the next activity. This may seem an extreme example but in 1980 I saw this system operating in a Head Start nursery in Pennsylvania, USA. The children had to move around a circus of activities, each one lasting twelve minutes, then a bell rang and the children had to move to another activity. Each activity had an adult to focus the children on the objective for that activity. An example of one of the activities was to stick some pre-cut shapes under or over a line. (The objective was to know position, under and over.) It was not until I had finished working with the children that I realised the objects were supposed to be acorns on a branch! I found it was a rigid system that did not allow for creativity or for children to have any depth of experience. The children found free time difficult to manage because they were not developing social skills such as negotiation. The practitioners were very envious of the English nursery system and longed for the same opportunities to allow children to explore and learn for themselves. I have noticed over the years that many of the American ideas I experienced back in the 1980's have been introduced to this country, despite the lack of evidence suggesting that their system achieved better results than ours. I wondered why it had become more of an influence than European approaches where there is plenty of evidence to show that many countries such as Finland have greater success (PIRLS 2007, Prais 1997).

2.5 Social learning position on the curriculum
Within early childhood education there has always been influences from the behaviourist approach but perhaps more has been taken from the social learning theory which developed from the behaviourist theory. The social learning theory has a strong emphasis on children learning social behaviour through observation of role models and the behaviour of others. (see Fig 2.3) Children learn by watching the adult model the desired behaviour and then imitating it.
The importance of role models is emphasised and lack of appropriate role models can have negative effects on learning and behaviour.

SOCIAL LEARNING THEORY

- Goals are pre-set.
- Easy for outsiders to assess.
- For all children.
- Adult controls learning: What / When / Time / Where / How.
- Do as others do.
- Behaviour is observed for assessment based on pre-determined measures of performance.
- Child is directed to task.
- Learning happens through modelling and imitation linked to goals. Modelling and imitation happens through observation
- The child develops a sensory approach to learning.
- The workforce of the future is reflected in the curriculum.
- No need to wait for the child to be interested or ready. Learning is pre-planned.

Fig 2.3 Social learning theory

An example of this could be the lack of men in early years education. A consequence of this shortage of men could be that it presents limited opportunities for boys to observe education as a male activity. Men only make up 16% of all primary school teachers in 2007 according to the Department for Children, Families and Schools. Graham in Education Guardian (2007) concluded that whilst the situation did not affect the results attained by primary school children, it did have an impact on children who did not have other strong male role models in their lives. These figures are not specifically related to the early years where the number of men is even less:

> *"The consensus, then, is that gender does not determine attainment, but that men can be a beneficial influence for some pupils."*
> (Graham 2007 p1)

Within this model of social learning theory clear goals are set for the child's learning but the adult models behaviour linked to those goals; children then have

the opportunity to imitate the behaviour they have observed. This social learning theory was advocated by the Nottinghamshire Inspectorate when encouraging practitioners to use the whiteboard to model writing while three and four year olds observed. It was also advocated at a meeting of the Nottinghamshire Foundation Stage Network (2007) at which it was suggested that practitioners engage in "pole bridging" where adults model activities and give a dialogue at the same time about what they were doing. This links to the work of Vygotsky discussed in Chapter One.

2.6 Conforming to society position on the curriculum and conforming to culture theory of the learner

The conforming to society position on the curriculum relates to the conforming to culture theory of the learner. (see Fig 2.1) It is an objective based approach to setting goals so the curriculum is rational and orderly. When the curriculum is organised in this way it takes a conforming to society position on the curriculum. The more I read about the "conforming to society" position, the clearer the links become with the FS curriculum and later the EYFS curriculum. I wondered who was aware of this, whether advisors and inspectors knew, whether the Secretary of State responsible for early years education knew, and how many teachers had considered where the EYFS came from? Did they need to know and what difference would it make if they did or did not know? Was it written as a conforming to culture / society model or is that the way inspectorate had interpreted it? The objective focussed approach of the ELG's and FS profile fits into this model. It is a very rational approach that controls the curriculum in a very systematic way with the ELG's being set by the government for every setting. Therefore when a child walks into a nursery for the first time there is a set of goals ready and waiting for him or her to achieve.

The pedagogues I met in Denmark (2007) could not understand why we had to spend so much time on planning and assessing our curriculum. They said it was not possible to set goals for a child you had not met because you didn't know what stage they had reached in their development. Mac Naughton (2003 p148) lists the frustrations of practitioners having to work within the constraints of a conforming to society curriculum including…… '*putting coloured dots on activities so that it looks like they match children to plans. Filling out check lists to prove all areas of the curriculum are covered. Finding easy things to write about, in observations, because the important things were too hard to put down on paper. Compartmentalising child development.*'

These frustrations would be all too familiar for many early years practitioners. I could see how the conforming curriculum would appeal to people who like to be in control; this has strong links to power issues discussed later in this chapter. I appreciate the appeal of this approach for a government attempting to monitor progress and demonstrate success in a wide range of public and private settings as it is minimalist in terms of monitoring and assessment from outside agencies. Practitioners state what they are going to teach, how they will teach it and how the learning will be assessed. Therefore a person can come into a setting and easily check if the lesson has taken place effectively. This is much less messy than allowing children to take the lead in what they learn and how they learn. Time is controlled by the adult - when to play outside or when to have a drink and snack; space is structured - practitioners are told to have clear areas for writing, numeracy etc. and within that area the resources are clearly linked to the learning that is intended to take place. Practitioners know what skills and knowledge they intend teaching to the children.

The more I read about the conforming to society position, the more I understood where the FS and EYFS curriculum came from. The gaps became clearer between my understanding of good practice in early years education and the constraints of the curriculum when I scratched below the surface.

> *"Educators will take a lead role in directing children to specific tasks, moving them on to new tasks and deciding when tasks should be completed. This is because behaviourist approaches to teaching and learning rely heavily on "learning episodes."*
> (Decker and Decker 1992 in Mac Naughton 2003 p134)

Mac Naughton goes on to say that the technical approach adopted in the conforming to society curriculum deprives both the teacher and the learner of power over what is learnt, as the curriculum is pre-set and therefore the teacher delivers what is prescribed. The children have limited choice in what to learn and where to learn it. The Early Learning Goals (see Appendix 4) appear to rest on several assumptions that could be drawn from behavioural thinking about the child, from cultural transmission and from technical approaches to the curriculum. (see Fig 2.2)

2.7 My stance on these approaches

As a practitioner I appreciate elements from the *conforming to culture, behaviourism and social learning theory.* I use elements of each in my own practice such as modelling role play and using a "very good stamp" to reward good behaviour. I do not see the behaviourist model as the underpinning model for the majority of the learning which takes place in our setting although I can see how the FS curriculum was shaped to fit the "conforming to society" model. For me the behaviourist and social learning approaches play a supporting role which has its value when used in the right place at the right time but it does not convince me it is the best approach for the children I teach.

As a practitioner I also find my position draws on elements of the conforming to nature or maturationist model of the learner (see Fig 2.4).
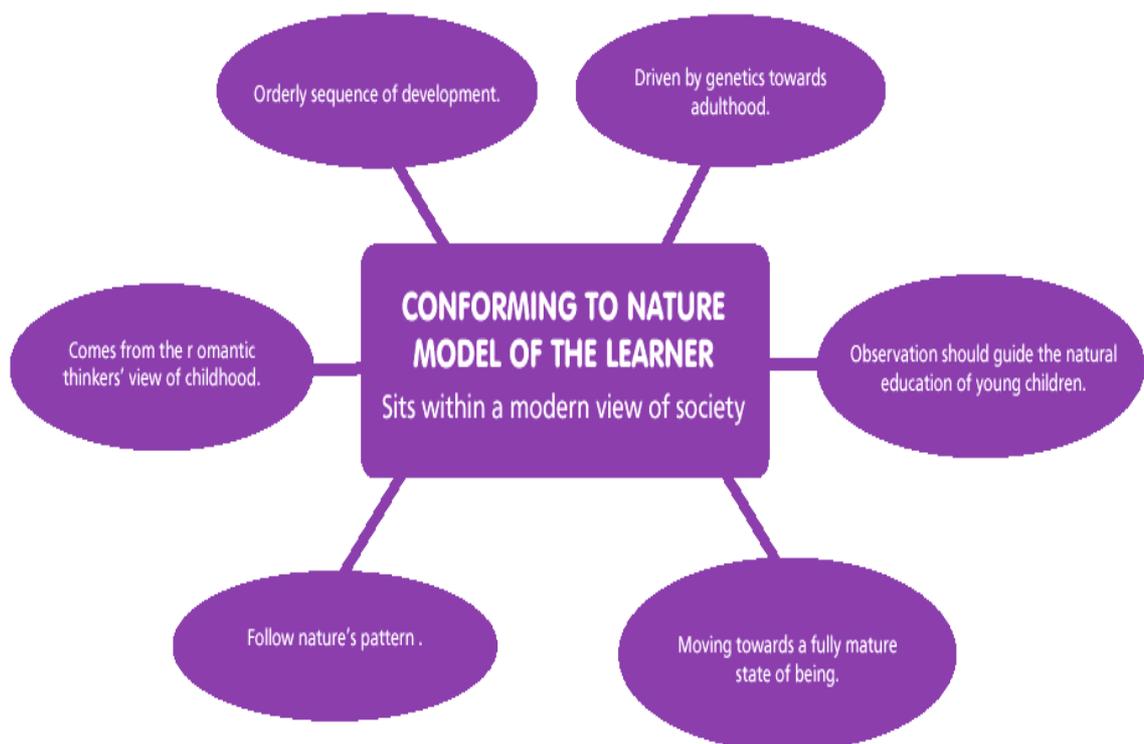
Fig 2.4 Conforming to nature model of the learner

2.8 Conforming to nature model of the learner

Conforming to nature theories derive from the Enlightenment traditions (Rousseau 1762; Froebel 1885) and have had a strong influence on early years' pioneers such as Margaret MacMillan (1919). It came from a Romantic view of society which advocated following nature's path and the natural development of the child. Maturationists believe in encouraging children into an adult way of thinking through an orderly sequence of development in which the child moves towards a fully mature state of being which is driven by genetics. (see Fig 2.4) In this approach, observation is the key to guiding the natural education of young children. Arnold Gesell (1880-1961) was influential in mapping a range of age based behavioural norms based on observations of children in the 1920's and 1930's. The idea of children passing through stages of development is still widely accepted today. A non-interventionist, free play approach to outdoor education would be for the adult to leave the child to get on with it, which may be fine for some children but it underestimates the adult role in nurturing dispositions (Garrick 2004).

I empathise with the idea of not hurrying children into an adult way of thinking by putting them under enormous pressure to grow up quickly. This seems a very gentle approach, I can find areas of empathy, but it also seems quite a naive view of childhood which appears to lack excitement and inspiration. I fail to find a solid theory of how children learn which I can empathise with in this approach. For me the most important element to take from this theory is the role of observation in determining the stage a child has reached.

Having established my position as a constructivist from the *reforming through interaction between nature and culture model* and having established my reasons for thinking that the early years curriculum has been developed broadly from a *conforming to culture* model and within that model it tends towards the *conforming to society theory*, I then wondered where the transforming model fitted into the picture, if at all.

2.9 Transforming culture and nature model of the learner leading to a transforming society position on the curriculum

I also find my position draws on elements of the transforming culture and nature model of the learner. (see Fig 2.6) This model comes from a postmodern view of society and a poststructuralist view of the child.

It views learning as a process of change and transformation and is based on the idea that it is through our interactions that we transform each other. The transforming position advocates that there is more than one way to view something (see Fig 2.5). Key thinkers include Burman (1994) and Cannella (1997) who perceive child development as problematic because it is culturally constructed and gives adults control over children.
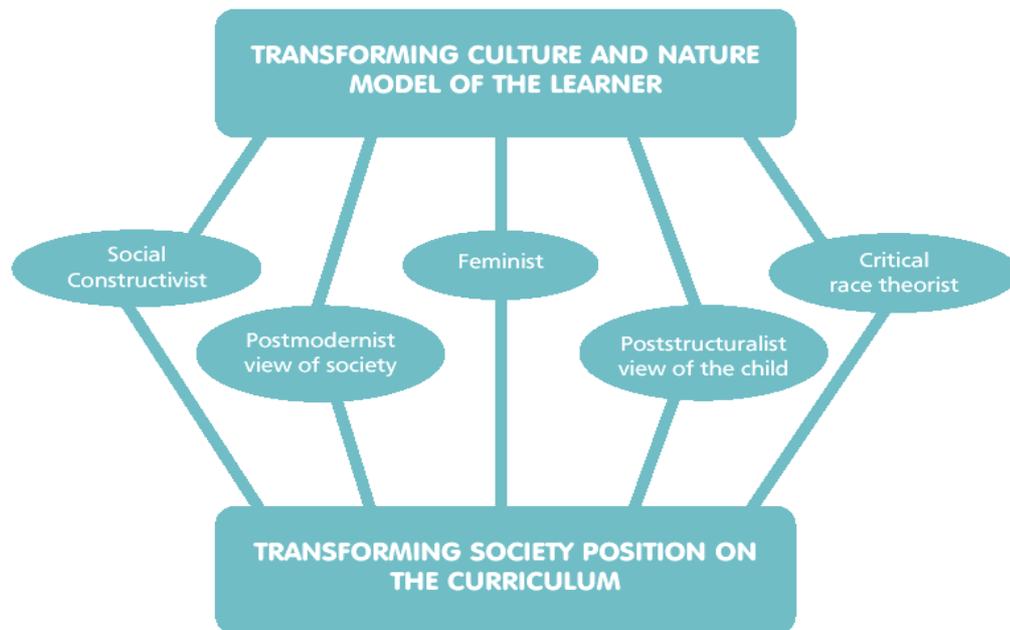
Fig 2.5 Transforming culture and nature model of the learner leading to a transforming society position on the curriculum

The transforming position appeared to be establishing some influence on present thinking about the early years' curriculum by recognising that there is no one right way to teach a child but many possible ways. Certainly this idea is creeping into our national education policy with the emphasis on individual learning programmes developed at all levels throughout the education process.
 (see Fig 2.6)
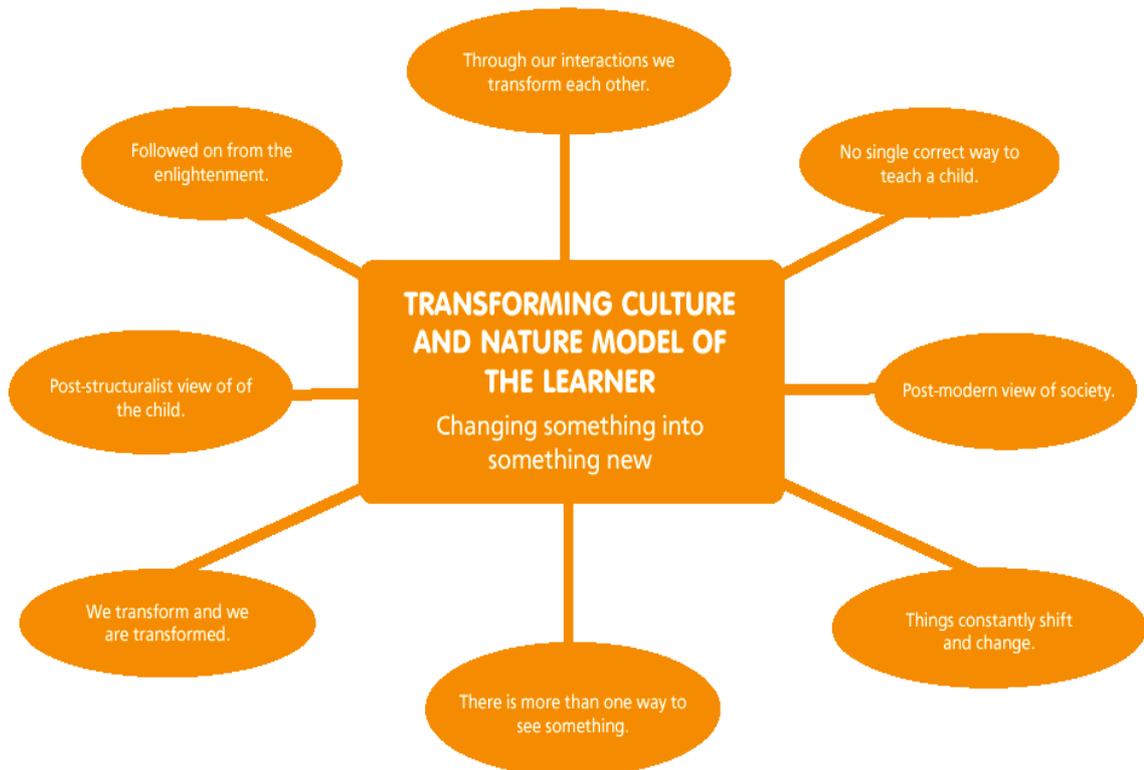
Fig 2.6 Transforming culture and nature model of the learner

The idea that we transform and are transformed was also picked up by social constructivists who came from the reforming model. (see Fig 2.7) Social constructivists have their roots in constructivism described in Chapter One and bring together aspects of the work of Piaget, Vygotsky and Bruner. As this has also been an outcome of my work I was particularly interested to see where social constructivism fitted in with my thinking. I could empathise with the idea that the adult facilitates the child's learning by supporting the child, providing an environment to challenge the learner to become an effective thinker and engaging in dialogue. Through my research I have discovered that facilitating and teaching require different skills, facilitating gives the child the opportunity to be active and to take ownership of the learning. This difference is highlighted in the Danish pedagogue approach to early years' education. Through using our school grounds as a forest school I have experienced the opportunities outdoor learning has provided for enabling children and practitioners to work within a social constructivist frame. We find many opportunities to challenge children to think thus the outdoor environment both challenges and supports learning.

Fig 2.7 Social constructivists

As a practitioner I find much to empathise with in the transforming society position in terms of its strong belief in promoting equality, opening possibilities to all children and helping children to deal with unfair situations in the world. Goals should contribute to a more socially just society and as such a critical approach is taken to issues such as gender, race, disability, empowerment and equal opportunities. Within the transforming position observation is seen as always biased because each observer has a particular "lens" through which they see the child. Therefore observation would not be part of this equitable stance for assessment but may be used as a collaborative approach with children. This links to the poststructuralist view that educators can never capture the truth about a child, only partial knowledge. This is because the influence of the power relationships get in the way.

2.10 Power relations and equity

As a researcher studying a setting and being a practitioner in that setting, there are issues of power and equity. As a teacher in the setting I have a lot of power to manipulate the environment and I need to acknowledge my lack of neutrality. Simply by embarking on the research meant that changes would be made to the setting during the research process. This was not going to be a piece of research where the variables would be constant. Equity is about justice and fairness, I wanted to be fair to the children in my setting by doing justice to the way I observed them and reflected on those observations. I wanted the observations to be a source of power for the children, giving them a voice to help practitioners plan better for their future learning. I hope I have been honest in identifying my own bias in this study and I acknowledge that I have more power than the children I have studied. There are however other positions of power that dominate my own freedom to make decisions and these powers link to the curriculum I have to teach.

2.11 Power relations in connection with the different positions on the curriculum

Can learning ever be value free? Can learning ever be a uniquely individual activity? Certainly not within the early years setting; children come into a space which has been organised by adults, resourced by adults and a curriculum where goals for each child have already been established by the government. The adults have been trained in specific teaching methods to support the child as a learner. Therefore when a three year old enters a setting there is already a strong power relationship that will affect the learning that takes place. Having established that the adult has more power than the child, it is then the responsibility of the adult to decide how much power is to be given to the child. It seems as though this is a key factor influencing which learning style is adopted. For example if the practitioner wants to keep tight control of the learning then a behaviourist approach is inevitable but if the child is given some of the responsibility for learning then a constructivist approach can be developed.

In 1992 an American psychologist called Urie Bronfenbrenner published his theory about the ways that the environment and the society a child grows up in, influenced that child's development (in David 2004). His theory was known as the "ecological systems theory" and he stressed that children had different childhoods in different communities. He believed that young children should

actively be involved in their own development and learning. He looked at how children interpreted their upbringing and concluded that children recognised where the power lay in their community. Habermas (in David 2004) agrees that children are capable of constructing their own meanings but generally they take on meanings accepted by the majority of their cultural group. It is the people in power who in a society or group express and share these meanings; therefore children accept the values of those in a position of power.

Power issues relate to each level of education. For example if a head teacher trained to be an Ofsted inspector, as many do, and wanted to be seen as such, would that person be able to stand up for the staff at his / her school if there was conflict with another inspector over an issue. Or would this conflict of interest mean that the head teacher would use their power to side with the inspector rather than support their staff. If it were the latter then the member of staff would be faced with a powerless situation because the person who should be supporting them and making the balance of power acceptable, would not be acting in their interests.

2.12 Who is empowered to shape the curriculum?

I became increasingly interested in how much knowledge early years practitioners, head teachers, advisors, inspectors, lecturer and policy makers had about best practice for young children's learning. For example did they come to their own opinion based on informed knowledge about the different models of children as learners or were they only given one model and expected to accept it as the most appropriate model to use? If it was the latter then who decided on the model and what information did they base it on? If it was the former, where were these people getting the opportunities to explore different theories - was it through initial training or in-service training? My experience of in-service training was of a generally spoon fed approach, delivered as a slick package on what to teach and how to teach it, where practitioners were informed of the latest initiatives which were declared to be good practice by Ofsted. The target led culture which has moved through the education system into initial teacher training has had the effect of gradually narrowing the opportunities for students to consider a wide range of possible approaches and think beyond the national curriculum.

2.13 What is empowerment?

Empowerment has a theoretical background strongly influenced by Freire (1921-1997) who developed a theory for critical curriculum and empowerment.

> *"He strongly believed that all education has social and political consequences. He also believed that educators have a moral, social and political responsibility to be involved in education for social transformation which creates a more just and equal social world. These beliefs underpin current anti-discriminatory (or "anti-bias") approaches in early childhood education and care."* (Mac Naughton and Williams 2004 p275)

If a person is empowered it indicates that they have the ability to do something for themselves or for others. For example we empower politicians to make the laws on behalf of all citizens. By empowering someone we indicate they can take greater control. Teachers have become less empowered as the curriculum has become more prescriptive. Empowerment should create greater social justice; children are empowered when child initiated activities are happening within a setting because the child is taking more responsibility for their learning. An overall goal of social justice and equity can be reached when both the child and the practitioner interact to choose the content of the curriculum. This is a far cry from the prescribed curriculum of the EYFS with its pre-set goals. It is not however beyond the reaches of the children who engage in extended periods of time outside because the choice of activity can be balanced between the adult and the child.

> *"If we trust children to be in charge of their learning they will develop more quickly socially and emotionally as well as physically, and prove that our trust is not misplaced."* (Ouvry 2000 p49)

I found it interesting to reflect on a forest school group I observed in Denmark and to consider who had the most and who had the least power in determining what to do. In conclusion I think it was the children who were given the power by the adults as the majority of activities were either child supported or child initiated. The adults spent most of their time being guided by the needs of individual children. The overall timescale was in control of the adults e.g. what time to have lunch and a few short whole group activities but at the end of the session the children had controlled most of the day's happenings.

2.14 Power relationships and verbal interactions

In the previous chapter I discussed the role of language in the learning process. Language also has implications when it comes to power issues. It tends to be the children who are less verbal who have less power as they tend to go along with the ideas of the most verbal children. The most verbal children then gain more confidence because they see action being taken from their suggestions which in turn encourages them to offer more verbalisations. This spiralling effect carries on as the child develops; it is therefore important to find ways of empowering the less verbal child. A child may be less verbal because they have poor speech, because of shyness, cultural differences, lack of concentration or because they prefer other forms of communication. I discuss this further in Chapter Six. Stirling Council (2000) attempted to address this issue by instigating the Children as Partners project. It highlighted the importance of adults listening to children and for adults to be seen to act upon what they heard.

> *"Children were empowered to express opinions and feelings, knowing that adults were listening. Changes in organisation reflected their comments. For example, more outdoor play provision."* (Stirling Council 2000 p10)

The EPPE project (2003) report referred to in Chapter One, expanded on knowledge of how young children learn by stating the most effective settings used a play environment to provide a basis for instructive learning and had an equal balance between who initiated the activities. The report went on to say that open ended questioning and adult modelling combined with sustained periods of shared thinking were associated with better cognitive achievement. Shared thinking could not happen without verbal interactions between the adult and the child. Even in the most effective settings only 5% of questions were open ended. Freely chosen play activities provided the best opportunities for adults to extend children's thinking which must include language opportunities. It may be that extending child-initiated play, coupled with the provision of teacher initiated group work, improves opportunities for learning. As research has indicated (EPPE 2003) effective pedagogy balances teaching and the provision of freely chosen yet potentially instructive play. This research supports the idea that the activity was equally balanced between practitioner and child in the most effective settings and the extent to which staff extended child initiated activities was also important.

2.15 Does research influence policy?

It can be hard to tell if policy is designed to be based on a specific position on the curriculum; I feel it is more likely that policies evolve and can then be matched to theoretical positions. It seems that research is in a good position to influence policy if it is widely accepted and well publicised but it can take many years before it reaches a position of national influence. If research does influence policy then it has become a powerful tool.

I identified evidence of some research influencing policy making such as the EPPE project but also instances of research evidence being ignored or undermined by other agendas such as the Post 140 report. The EPPE project found that the most highly qualified staff were most effective in their interactions with children, using the most sustained shared thinking. Interestingly, less qualified staff were significantly better as pedagogues when they worked with qualified teachers. The early years professional qualification introduced in 2007 aims to raise the qualification of people working in the private sector of pre-school provision. It is aimed at people who already have some qualifications and some experience but are not teacher trained. However without a career structure linked to progression in pay it may be difficult to sustain in the private sector. The influence of the EPPE study had been reflected in the EYFS curriculum which demonstrates that governments are able to take note and act upon information which is presented to them.

> *"A high quality, continually improving setting will provide well qualified and experienced staff, so that staff work in an environment that recognises the impact of higher qualifications on the quality of provision."*
> (GB/DfES 2007 p9)

This gives me hope for the future that one day our education system may work on a bottom up approach where teachers and practitioners are allowed to build on what a child already knows by following their individual needs and interests instead of following a completely pre-planned age-related programme of study.

2.16 Summary

In order to address my research question, developing good practice in the provision of outdoor education in the early years, I have looked at different theoretical positions in terms of the learner and of the curriculum and related them to the statutory requirements for the early years' curriculum in this country. I have considered my own position in relation to the positions of the learner and positions on the curriculum described in this chapter. I established the context in which this research into the use of the outdoor environment in the early years has taken place. During the time of this study, much has changed and constraints and opportunities have been provided by the changing curricula and by my own growing awareness of the political issues framing the education of young children. This links to my second theme - *The Impact of National Policy*.

I have discussed my experiences of the power of being a teacher researcher. Power relations happen at different levels. The word *power* implies that some one has more control over something than another person. In the early years setting I have established that the adults have the most power but they operate under a system where others outside the setting have the power to control the curriculum and teaching style which is put into practice; this in turn limits the power of the practitioner. Being a teacher researcher has enabled positive decisions about the curriculum to be made giving our team of practitioners a sense of ownership and control over how we deliver the EYFS curriculum, this has been an empowering process.

Little attention seems to have been given to the power of the child who is on the receiving end of education. I have raised questions about the relationship between research and policy making and identifying the tensions between the ideals of a child centred and play based approach to child development with the target driven and goal orientated curriculum. In the next chapter I focus on the central importance of play for child development and the role of the practitioner in respect of play opportunities. I relate this to the context of the outdoor environment.

Chapter Three
Play and Pedagogy

Play is a child's work and as such it lies at the heart of everything we do in the nursery setting. The way play is presented to children in terms of opportunities, resources, support, time and space, as well as the emphasis placed on the value of play, is the responsibility of practitioners and can be seen as the key pedagogical approach. An understanding of play and its role in the development of children's learning underpins the early years curriculum and it seemed appropriate to link play and pedagogy together in this chapter:

> *"It has been long recognised that most high-quality, well-planned and developmentally appropriate experiences in a pre-school setting will have play as the means to promote learning. Through the motivating nature of play-based activities the child has the opportunity to experiment, to explore and to engage for long periods of time. It is an 'active' form of learning of extraordinary potential."* (Riley 2007 p19)

Work in this chapter links to all three themes. Theme One - *Children's learning – I discuss the impact of learning dispositions for children's learning outcomes. Theme two - The impact of national policy –* I discuss the role of the practitioner in implementing an early years curriculum. Theme Three - *Development of the outdoor environment –* I discuss the importance of giving children the opportunity to play and interact in the outdoor environment. I draw together some definitions of play, discuss some of the people who have influenced my understanding of play and focus on how theories of play impact on the nature of learning in the outdoor environment. I discuss the people who have been influential in my thinking particularly the work of Bilton (1998) Ouvry (2001) and Bruce (2004). I am not attempting in this chapter to give a comprehensive account of the historical and theoretical nature of play but to discuss some key aspects which relate to the links between play, the curriculum and outdoor learning which have been significant aspects of my thinking during the research process.

3.1 Playing with a purpose

The observations in my study are mainly based on children at play in the outdoor nursery garden and school environment. By observing these play activities I have been given a window of opportunity to see how children learn and develop through

play. By analysing these observations I have attempted to develop best practice for children using the outdoor environment:

> *"Play has long been recognised as the key way in which children come to make their own sense of their often confusing world. Playing allows children to invent their own rules, to integrate the past with the present, to recreate the present and rehearse the future."* (Ouvry 2000 p9)

A definition of what constitutes 'play' is easier said than done as there seems no united consensus of opinion. I have often heard the term 'play based approach' used when what is actually meant is a 'practical approach'. These different perspectives and understandings about what constitutes play is a key factor to be aware of when studying the curriculum documentation for early years children. Ouvry (2000 p9) defined play as happening when:

> *"children bring their individual knowledge totally under their own control and "pretend". So children do not play all of the time. However, what they must have in order to benefit from play is long periods of time in a well-planned play-based environment."*

For a summary of some of the key pioneers and educationalists influencing early years practice in relation to play (see Appendix 6 and 7). We tend to base our importance of play on historic tradition. In the early 1800's Froebel established the kindergarten as a garden for young children to exercise, play, tend the garden, observe wildlife and develop spiritual awareness. (Garrick 2004) Margaret McMillan in the early 1900's helped to pioneer the role of play in the development of the young child with an emphasis on health and emotional well being and she used play for the basis of her garden nursery. Isaacs (1932) was particularly interested in how first hand experiences helped children to understand a concept and the outdoor space was ideal because there was room for big movements and for all the senses to be engaged. Isaacs was particularly interested in a child's intellectual and emotional development through play. Wood and Attfield (1996) warn against placing too much emphasis on past tradition because historical tradition is often contradictory and it has developed in a very different culture to ours which may mean the translation is not contextually accurate. I feel they are warning us not to let our hearts rule our heads by basing our curriculum around a romantic view of past childhoods and play opportunities rather than basing it on up to date theoretical accounts. I can empathise with their position but I hope throughout this

study I demonstrate how much we can learn from people who pioneered the place of play in the early years curriculum and still make it relevant and equally important for children today. In early years' education we do have a legacy of play based learning, derived from people like Froebel (1885), McMillan (1919), Issacs (1932), Erikson (1950), Vygotsky (1934), Piaget (1929), Bruner (1980) and Dewey (1963). Bruner saw play as a child's work, Vygotsky saw play as creating the child's ZPD because children worked at a higher level when playing and Dewey saw play as a very personal activity for the child.

> *"Play is not to be identified with anything which the child externally does. It rather designates his mental attitude in its entirety and in its unity. It is the free play, the interplay, of all the child's powers, thoughts, and physical movements, in embodying, in a satisfying form, his own images and interests."* (Dewey 1900 in Skilbeck 1970 p58)

Dewey advocated that play must not be restrained or restricted by a curriculum yet today we have a tightly restricted, objective based curriculum which in recent years has squeezed free play to the boundaries and devalued the type of free choice problem solving advocated by Dewey. His work is reflected in Bilton (1998 p90) when she states:

> *"Important issues concerning play outside are that:*
> *children know they have time and space to play;*
> *they will not be interrupted;*
> *they can control the environment themselves;*
> *they know they can bring anything within reason into the play scene, including people."*

Children now have less opportunity to play outside than children did twenty years ago and by looking for ways to enable them to do this it might mean challenging our comfort zone in relation to risk taking:

> *"Will the proposed activity give that sort of expression of these impulses that will carry the child on to a higher plane of consciousness and action, instead of merely exciting him, and then leaving him just where he was, plus a certain amount of nervous exhaustion and appetite for more excitation in the future?"* (Dewey in Skilbeck 1970 p59)

I cannot help visualising the hours children now spend on computer games, Dewey could have been writing about them. When children learn through play activities their learning should be transferable to other parts of their life. Smilansky and Shefatya (1990 in Bilton 1998) argue that children can use the manipulation of symbols in dramatic play to support later learning in maths and writing. This can be seen when boys start using a pencil because a practitioner has added emergent writing opportunities to their role play area, such as a building site or garage. Children demonstrate high cognitive levels through their role play, Smilansky (1968 p71) describes this as '*sociodramatic play*'. As life changes so does the nature of play for our children, perhaps we should allow more challenging and adventurous play including play fights. There is evidence that children, especially boys, benefit socially and intellectually from rough and tumble play (Garrick 2004) and need to push against each other to trigger certain senses in the brain. The outdoor environment offers a safe place for this type of play to develop and this is acknowledged and encouraged in Danish forest schools:

> *"Studies by Broadhead (1997; 2001) and Holland (2003) have convincingly demonstrated that the kinds of play which have not traditionally been approved in pre-schools – rough and tumble, aggressive play and even gun play – can have hugely positive outcomes for children's social and emotional development."* (Riley 2007 p47)

Straw (1990 p113) described the role of play as the most appropriate method of learning:

> *"children were naturally drawn to it and again the garden was felt to be an environment that encouraged play, both solitary and with others. Through this play children's language developed; mathematics and technological understanding grew. Children could come to appreciate size, shape, position, could learn the skills of planning, designing, re-evaluating as they built their constructions. They learnt social skills of negotiation, compromise, tolerance when playing imaginative games."*

In the Statutory Framework for the EYFS (GB/DfES 2007) there is only one of the Principles into Practice cards with the word 'play' in the title at the top of the page:

> *"In their play children learn at their highest level, play with peers is important for children's development"* (Card No. 4.1)

This statement exemplifies the view that in their play children behave beyond their daily behaviour (Edgington 1998). Pelligrini (1980) studied kindergarteners at play using Piagetian categories and showed a child's level of play was a good indicator of achievement in academic skills. (Katz 1984) Play is based on practical experiences and is intellectually demanding and in the same way that child development passes through specific stages, so can the development of play. Parten (1932) identified the stages of play as:

- *unoccupied and onlooker* – which describes a child who is observing but not participating in an activity;
- *parallel* – in this category the child plays alongside others but not with other children;
- *associative* – the child plays and shares the action with others;
- *co-operative* – describes the child who displays a higher level of social behaviour and there is a defined definition of labour and role.

<div align="right">(Parten 1932 in Riley 2007 pxxiii)</div>

Cousins emphasised that play is a freely chosen activity yet many examples of play based activities in the EYFS curriculum are adult directed and would not necessarily have been chosen by the child. Cousins described play as:

> " *essential for physical, emotional and spiritual growth, intellectual and educational development and acquiring social and behavioural skills. Play is a generic term for a variety of activities which are satisfying to the child, creative for the child, and freely chosen by the child."* Cousins (2005 p14)

Cousins also makes reference to the National Children's Bureau publication (1992) which has underpinned the UN Rights of the Child and which links play and the acquisition of knowledge and culture and refers to its long tradition in education:

> *"Education is about the pursuit of the highest forms of knowledge which are central to the culture." (*Plato c438-347 BCE)

The link made between education, play and culture is a significant one and the socio-cultural influences are strong in an early years setting. They appear on a practical level to include things like the resources and organisation of activities within the setting such as the imaginative play area, cooking, dance, story books, music and the provision of familiar objects in the role play area. On a wider scale

the national culture of a country impacts on the way knowledge is valued and pursued which impacts on the status play does or does not have. For example the Reggio Emilio approach in Italy uses the outdoor environment for specific purposes such as collecting natural materials to study inside. The Danish forest school culture on the other hand sees the outdoor environment as the base for learning with no need to bring things inside. These cultural differences impact on the way play is provided and supported. In this country at the time of McMillan, play in the nursery garden was significant but gradually the nursery building became more important and at the present time there is movement towards seeing the inside and outside being equally important. By offering play opportunities in the outdoor environment we can give children a chance to reconnect with outdoor spaces. By using school buildings as the main base for learning we have tended to separate children from opportunities to learn through play in the real world.

Katz (1984 p5) suggests there are some distinguishing features of play which are commonly agreed to define the nature of play. These include:

- intrinsic motivation;
- attention to means not end (the process is more important than the end product);
- non-literal behaviour (seen in imaginative play);
- freedom from external rules (children negotiate their own rules);
- self rather than object (the child does not need to know what an object is, only what they can do with the object);
- active engagement.

I do not feel I can offer a single definition of play but I am happy to take bits from a wide range of definitions which have come together to form my own concept of play and on the basis of this information I feel I can identify play in my setting. Some definitions of play focus on social categories and some on cognitive categories (Katz 1984). Social categories are not hierarchical although cognitive categories may be. In social play children will move between solitary play, group play and parallel play, each type can be part of developing co-operative play. If practitioners are going to support play in their settings they need to observe what is happening in both social and cognitive play forming an holistic approach which meets the developmental needs of all children (Katz 1984).

3.2 Dispositions for learning identified in our setting

How children learn and what children learn are the two strands which early years' practitioners have to draw together through play. How children learn relates to a range of important dispositions which provide a child with the tools to be an effective learner. In my setting, through observation we found that children made greater progress in developing their dispositions for learning when they played in the outdoor spaces within our school grounds than when they were restricted to the nursery building and garden. We also found these dispositions to be a factor in how well a child achieved in the six areas of learning (see Chapter Six). We have found that for children who have poor listening, co-operative and social skills and are not reaching their potential in communication, language and literacy, for them play based activities such as role play, den building, hide and seek, jumping in puddles, flying kites, climbing trees and observing small creatures, all contribute towards the successful development of dispositions which enable them to be successful learners. We identified and defined our own list of dispositions which we regard as important:

- listening;
- concentrating (this is not the same as sitting still);
- co-operating with others;
- working as part of a group;
- verbalising thoughts and ideas;
- observing;
- taking turns;
- sharing;
- following instructions;
- thinking critically e. g. speaking or acting with a considered response;
- showing respect for the environment and other people;
- being an enthusiastic learner;
- showing curiosity and asking questions;
- gaining confidence and persevering to achieve;
- initiating ideas
- discovering and solving problems

We developed this list throughout the first two years of our forest school experience. We felt they reflected higher level attainment rather than lower level learning identified by narrow targets such as sitting still or recognising letters. By putting our dispositions at the centre of our forest school approach we were looking for long term gains where children would be inspired to go on learning as opposed to the 'hit and run' attitude often observed in children when undertaking activities such as writing practice. (This can be especially true for boys). Garrick (2004) considers findings from several countries which suggest a need to develop a curriculum that can more effectively nurture learning dispositions for boys:

> *"An outdoor curriculum, offering opportunities for active play, exploration and the development of the language skills that underpin later academic development, may have an important part to play in boy-friendly early childhood curricula."* (Garrick 2004 p14)

Garrick goes on to say that this type of programme is likely to have more positive long term outcomes than formal programmes for boys and for girls.

3.3 Dispositions identified by others

Learning dispositions have been identified and classified differently by others. Carr 1999 in Bruce lists five dispositions – trust, perseverance, confidence, responsibility and courage which by 2001 had evolved to become:

- *"taking an interest;*
- *being involved;*
- *persisting with difficulty;*
- *communicating with others;*
- *taking responsibility."* (Carr 2001 in Riley 2007 p17)

These dispositions are seen as central to learning in the early years and play is the key to their development:

> *"These prerequisite skills and abilities, without which no individual can develop into a proactive, autonomous learner, underpin all that is conducted in the name of education in early years settings, and the opportunity to develop these learning dispositions makes up a large part of what is conceptualised as a curriculum."* (Riley 2007 p17)

Whether dispositions can be taught or whether they are acquired or are innate is a matter of debate. If children acquire them it is probably by being around people who exhibit them and by having opportunities to practise them. If this is so then the outdoor environment is an ideal place for them to develop. We found through our forest school activities that children had the space, the time and the natural resources for these dispositions to be acquired. When children engage in play activities they also engage in movement, sensory experiences and social interactions, these are all vehicles which enable them to learn more easily (Bilton 1998). Our forest school approach also highlighted the importance of the practitioner demonstrating and being a role model for these dispositions. This is why it became very important to us that as practitioners we were all enthusiastic, competent and committed to using the outdoor areas as a place to learn. We adopted the Child Involvement Scale, based on the work of Ferre Laevers, (Garrick 2004) to observe and assess the dispositions children exhibited in their outdoor play. Laevers was interested in children's deep learning rather than just how busy they were and identified signals to look out for during observations. These include, concentration, energy, creativity, facial expression and posture, persistence, precision, reaction time and language satisfaction. (Nursery World 16.1.03)

Dispositions feature in early years programmes in many countries, for example it is interesting to compare the International Baccalaureate Primary Years Programme statements I saw used in America (2005) with the Danish competencies I saw used in Denmark (2007). The Danish curriculum included literacy, numeracy, logical thinking, physical education and importantly identified a range of dispositions which children are deemed to need in order to develop skills and knowledge:

- *attention;*
- *concentration;*
- *co-operation;*
- *reasoning;*
- *imagining possibilities;*
- *inquiring – trying to understand.*

> *"competence in terms of the Danish curriculum represents the abilities (social, emotional and cognitive) and proficiencies that can be fostered and developed in children, in particular in the outdoor environment."*
> *(Williams-Siegfredsen Nursery World 4.8.05 p26)*

The International Baccalaureate Primary Years Programme aims to develop critical thinkers and to enable children to work at a higher level of thinking through attitudes that foster this higher level of learning. Under the heading of 'Attitudes – what do we want students to feel, value and demonstrate?' it identifies a range of similar dispositions:

- *tolerance;*
- *creativity;*
- *integrity;*
- *co-operation;*
- *confidence;*
- *appreciation;*
- *independence;*
- *empathy;*
- *commitment;*
- *respect;*
- *enthusiasm;*
- *curiosity.*

  www.ibo.org/pyp/curriculum/written/

By identifying various perspectives on dispositions which appear similar in nature, indicate that there is a widespread recognition of their value and importance in the learning process. Play is a process which can facilitate the development of such dispositions and the outdoor environment can enhance those opportunities for children to acquire them.

3.4 Delivering a play based curriculum outside

The framework of dispositions adopted in our setting enable us to make changes within our curriculum constraints, adjusting and negotiating between the way we have observed children learning by adopting a social constructivist approach and scaffolding learning, as described in Chapter One, with the curriculum and policy constraints described in Chapter Two. The outdoor environment is the enabling link for making changes and through working with children outside we have observed the development of dispositions and schemas (see Chapter Six) which has led to higher levels of involvement and deeper learning.

The Guidance Document for the Foundation Stage (2000) contains advice for early years practitioners on how children should be learning in a nursery setting:

- *children initiating activities that promote learning and enable them to learn from each other;*

- *children learning through movement and all their senses;*

- *children having time to explore ideas and interests in depth;*

- *children feeling secure, which helps them to become confident learners;*

- *children learning in different ways and at different rates;*

- *children making links in their learning;*

- *creative and imaginative play activities that promote the development and use of language.* (GB/QCA 2000)

These statements indicate a child initiated setting, without strict time constraints that would be compatible with a curriculum focus of schemas and learning dispositions but in practice it has not been compatible with the literacy strategy and early years practitioners felt under pressure to prepare children for that as a priority. An Ofsted inspection was critical of our setting because there was not deemed to be enough structured phonics teaching sessions and because we did not go beyond the ELGs with our three and four year olds. We never did find out what that meant. It appeared to us that as practitioners, we were left to swim in a sea of language which was manipulated to suit the individual using it. No wonder practitioners did not always know what to do for the best and were torn between the ideals of the play based environment and the demands of the target driven curriculum.

3.5 Being a learner in society today

In 1994 the Start Right report into life long learning highlighted the need for young children to have a "can do" approach to learning (Ball 1994). This report described the "art of learning" (learning how to learn) which involved skills and attitudes including motivation, socialisation, confidence, emotional well being and a sense of belonging:

> *"Modern education is on the threshold of a revolution. The findings of brain science, for example, or the theory of multiple intelligence, or the idea of different styles of learning or the recognition that people can learn to learn faster, are all pointing the way towards a new and powerful theory of*

learning which will be able to satisfy the three tests of explanation, prediction and aspiration." (Ball 1994 in TES 30.5.1997)

In this article, Pascal and Bertram say that the focus placed by the government of the time on the acquisition of knowledge in prescribed academic areas with baseline assessments mostly in language, mathematics and social development, has left a gap by not recognising the role of attitudes, dispositions and emotional well being in the learning process:

> *"Undoubtedly, intrinsic motivation is crucial to a child's learning. When encouraged and rewarded, the drive to explore becomes established, and children develop a desire for lifelong learning."* (Pascal & Bertram 1997)

Hurst and Joseph (1998) observed a four year old working with a teacher to match unifix cubes with a card showing different numbers of cubes; the task took twelve minutes. I love the phrase used to describe the end of this session:

> *"Julie was finally released from this work and went over to a partitioned off corner of the room where a kitchen corner had been created."* (p55)

I have observed many times that look of release when children are told they have finished a task and can go and play. Julie then goes on to demonstrate a much higher level of involvement in her chosen activity:

> *"In her self chosen activity she showed clearly that she was highly skilled in matching and had a good concept of what it meant. And yet she had struggled, rather anxiously, with the earlier task of matching the unifix bricks to the pictures on the cards."* (p56)

I can feel the stress for Julie in the unifix activity; this is the kind of stress that I believe has a negative effect on the way children learn and can hamper the development of positive dispositions:

> *"Learning is not only to do with the acquisition of knowledge and skills, but embraces coming to understand the needs and claims of others; acquiring physical prowess; learning the art of communication through language and the arts; and very importantly, learning about oneself, both as an individual*

and in relation to others. To "know thyself" has a great deal to do with a person's inner strength and happiness." (Hurst and Joseph 1998 p54)

This statement was written long before concerns were raised across the media about the quality of childhood experienced by children in this country. In an article entitled 'Toxic Childhood' (2006) Dr. Richard House, an early years teacher at Norwich Steiner School and lecturer at Roehampton University, referred to an open letter sent to the Daily Telegraph 12.9.2006 signed by over a hundred public and professionals in the field of child development and education. They were all concerned about the loss of childhood in contemporary life and expressed concern about how sedentary, virtual and screen based lifestyles were affecting the ability and behaviour of children in the world's richest countries:

> *"Their precocious, over intellectual development is founded on sand, with learning outcomes which deteriorate as the children grow older."*
> (House 2006 p14)

House refers to the work of Palmer (2006) who spent three years researching the influence of contemporary culture on child development and ability to learn. Her book 'Toxic Childhood' highlighted the need for children to spend less time in virtual worlds and more time in the real world. The comments of the open letter and Palmer's research were supported by findings from York University based on World Health Organisation data which showed that Britain came twenty first out of twenty five EU countries on measures of children's wellbeing:

> *"If our children do not have the opportunity to grow up in such an enabling environment the danger is that the behavioural and mental health problems that are now so endemic and rapidly increasing will become even more widespread, and our children will be ill-equipped to deal with the society of the future."* (House 2006 p15)

Concerns about the effects of modern life on childhood were picked up by Libby Brooks in the Guardian under the title "So, you want them to be happy?" She also refers to the open letter and highlights the point made that children need real play:

> *"But where? Under investment means that there are fewer open spaces for children to inhabit. And those that are left are dull and overtly safety conscious. Our society's profound risk aversion keeps children in their bedrooms with their dangerous computer games."*

(Brooks Guardian 16.9.2006 p1)

By allowing children more time outside we can address some of the accusations of modern childhood. Outdoor interactions enable children to move in large spaces, to engage in big physical play and to have fresh air and exercise. Garrick (2004 p10) discusses the increasing concerns about the health of young children. Pellegrini and Smith (1998) argue for improved provision for physically active play. Outdoor environments can address these issues. When we take our three year olds out for the first time and we go to the top of our school field we can easily tell which children are used to walking and which ones travel everywhere by car or pushchair.

3.6 Maximizing young children's learning
The debate continues on how best to deliver teaching and learning in the early years' at a local, national and international level.

> *"How can adults maximize young children's learning?*
> *Is young children's learning maximized by tightly structured experiences or*
> *by open- ended, play-based experiences?"* (Mac Naughton 2003 p10)

As an early years practitioner, I have often been required to impart knowledge to children, such as phonic knowledge.

> *"Deprived of a real understanding of both theory and policy, teachers are*
> *simply parroting the latest curriculum directives. Teachers in name but*
> *technicians in reality."* (Revell in Education Guardian 8.3.05 p2)

These curriculum directives are often done at the expense of teaching children the important attitudes and dispositions required for being a life long learner through a non-directive way of working, an approach which allows children to take on responsibility for their learning needs. Nutbrown (1996) says the life long learner approach requires significant organisation based on professional knowledge of child development which if skilfully done is made to look easy. This interactive approach originally practiced by Isaacs and McMillan is;

> *" effective because it allows for physical, emotional and social growth*
> *alongside intellectual development".* (Nutbrown 1996 p38)

If we are preparing children for the rest of their lives it should include the excitement of being a life long learner, not just showing children how to jump through the next hoop to achieve an objective. Affective dispositions for learning have long term positive effects on a child's future learning (Katz and McLellan 1991) and therefore should be at the heart of the curriculum. As practitioners we look for ways to organise, plan and deliver our curriculum to meet the needs of our children but we are faced with an extensive range of possibilities. Earwaker (1973) analysed three different methods of educating young children**:**

- open framework;
- programmed;
- child centred.

In 1972 Weikart, in his High Scope project, looked at the impact of these three methods on children in different settings, each setting used one of these methods to deliver the curriculum. It is worth considering the outcome of this research into different ways of organising a setting. Weikart used the following definitions to describe these three different methods:

- **Open framework**

Linked to the constructivist approach, programmes are worked out by the teacher not a programmer. It is based on the principle that learning comes from direct action and the personal experiences of the child. The curriculum which the teacher presents is based on a theory of child development mostly based on the work of Piaget. The teacher adapts activities to meet the needs of the child. Within this approach, knowledge must be actively constructed.

> *"Learning by the child is the product of his involvement with the environment structured by the teacher."* (Weikart 1972 p35)

- **Child centred**

 This approach centres on the development of the whole child and reflects positive values in society such as independence and self discipline where the child is respected as a unique individual. There is no pre-set curriculum with this approach and evaluations of outcomes are difficult to monitor.

- **Programmed**

Programmed or stimulus response training is where the teacher initiates and the child responds. This approach tends to be rigidly structured with the teacher dominating the child. I experienced this type of approach in 1980 at a Head Start nursery in Pennsylvania, children had to change activities at the sound of a bell.

One of the most important findings to come out of the Weikart study was the long term implications of the project. All three groups of children, when compared to a control group who had no programme of early years' education, required less special needs help later in school and stayed at school longer and therefore achieved better qualifications which increased their chances of becoming contributing citizens. I take some comfort in the fact that despite different teaching styles having phases of popularity and acceptability, whatever we do to support children in the early years, it will have some positive effect on their future.

3.7 Pedagogy

The way we teach or present the curriculum to children depends on our teaching strategy or pedagogical model, often described as the art and science of teaching. I like Athey's description of pedagogy - *"how children and curricula are taught"* (1990 p23). Athey describes three pedagogical approaches and looks at how a "constructivist" pedagogy, or teaching style, could be applied in early years' education. I refer to these later in this chapter. The Danish tradition uses the word *pedagogue* to describe the role of those who support children's development in a context in which care and education come together.

Jane Williams-Siegfredsen (2006) describes the whole child as body, mind, feelings, spirit and creativity, *as a social being, connected to others with distinctive experience and knowledge"* and the concept of a 'pedagogue' derived as it is from an ancient Greek word describing the person who walked boys to school and back. Pedagogues used this time to discuss the natural world and life experiences so it is an appropriate description for the role of professionals in the early years sector whose focus is both the care and education of the child. The Thomas Coram Institute has recommended the introduction of pedagogues to the government. It is not a term that is familiar or attractive in the English cultural context but I believe it is a refreshing and appropriate term which is suited to the ethos of a child-centred, play based approach to learning:

> *"Pedagogy builds on an understanding of children's rights that is not
> limited to procedural matters and legislative requirements"*

3.8 Pedagogical approaches and nurture

Attitudes towards play and the role of the practitioner or pedagogue have led to the development of a variety of approaches to the education of children in the early years. Each one has contributed influences which have in some way impacted on our own education system. I briefly describe some of the different approaches to a play based learning environment and pedagogical approaches in Appendix 8. These approaches, as well as the original Froebelian kindergarten model taken up by the McMillan sisters in the 20th century, have contributed to the pedagogy of the early years and all stand in contrast to the target focused and assessment driven model of the English EYFS curriculum which whilst written in the language of traditional child centred and play based approaches, is in practice often driven to operate in a very different style because of the assessment requirements of the end goals. Practitioners have different roles at different times when interacting with children in play situations; sometimes they act as observer, sometimes they facilitate by taking part or adding resources and ideas, sometimes they need to teach children how to play (Bilton 1998).

DENMARK

Nurture of the individual

Stress free learning environment

ENGLAND

Goal and target based curriculum

Stress develops because children are put under pressure to perform

91
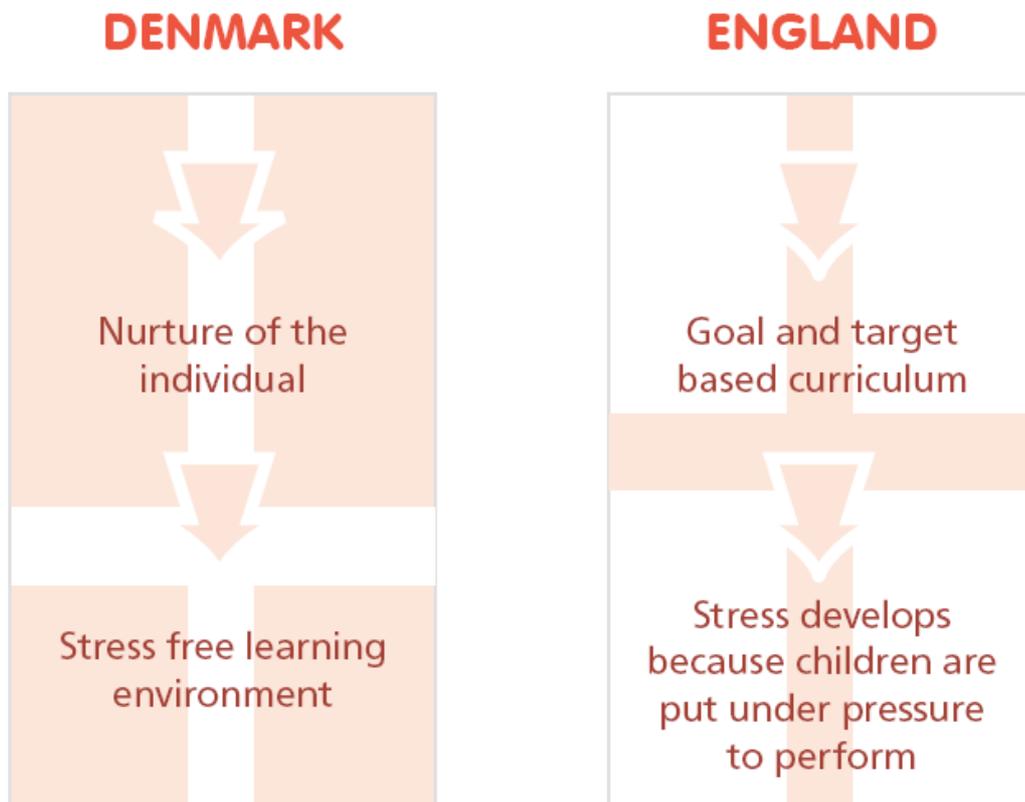
Fig 3.1 Comparisons between the Danish and English approaches

In Denmark, practitioners are highly trained pedagogues who study how an individual child's mind works and supports that child's learning. Pedagogues are highly respected (Nutbrown 1996) and train for four years, their qualification is equal to teacher training in terms of time and status, but different in terms of content. A focus on psychology and nurture of the individual child, gives it a unique status in the Danish childcare system and beyond. The Scandinavian approach is based on the nurture of an individual child and the wellbeing of that child, which is not measurable in terms of data. Pedagogues are trained to work in early years settings, after school clubs, special needs provision and with the elderly and vulnerable in society and it is a much sought after and values job for men and women (Nutbrown 1996). As part of the training, they can also specialise in the forest school approach. One of the differences between their approach and ours (see Fig 3.1) is that in this country we teach to pre-set goals which are waiting for the child before they step foot into a setting, offering limited regard for individual learning styles. Data is collected, analysed, and compared with like settings. The setting is judged without reference to the individual experiences of the children, or the value, well being and nurture that a setting may have put in place. We have no measure of stress levels we may be putting onto a child. The Scandinavian approach allows for a genuine stress free environment and pedagogues show a high level of respect towards the individual child. The relationship between adults and children is like a relationship between family members rather than a teacher / pupil relationship. Adults are called by their first name and there is more physical contact where children sit on, lean on and cuddle up to adults. In return adults show genuine affection towards each child.

In Denmark the Children's Welfare Commission has four goals to work towards for a policy on children (Villen 1993 in Nutbrown 1996):

- to respect the child as an individual in the family and in society;
- to give the child a central position in the life of grown-ups;
- to promote – in a wider sense – the physical conditions in which children grow up;
- to promote equal opportunities, in the conditions of life of children, both in a material and in a cultural sense.

Returning to Athey's definition of pedagogy *"how children and the curriculum are taught"* and linking it to the Danish definition which clearly involves the nurture of the whole child, we see an holistic approach to teaching and learning which gives autonomy to practitioners to develop play in the best interests of their children:

> *"The researches on the EPPE project have defined pedagogy to describe the set of instructional techniques and strategies which enable learning to take place and the organisation of the setting in which the learning occurs. This learning includes opportunities for the acquisition of knowledge, skills, attitudes and dispositions within a particular context.* (Riley 2007 p18)

In 'Developing Learning in Early Childhood', Tina Bruce talks in her dedication about early years practitioners:

> *"These are not trendy practitioners, following every educational fashion with superficial enthusiasm. They will not be forced into ways of working with children which go against their considered, evidence based philosophy. Neither are they stuck in a rut, but seek, throughout their professional lives, that which develops their practice in the Froebelian spirit….."* (Bruce 2004 dedication)

I would feel happy if Bruce had used this as a description of myself and the practitioners in my setting. I think it is a good encapsulation of how early years practitioners take on board changes and develop their practice. I also think it is a considered and healthy approach to adopt towards change. It made me wonder what experienced practitioners would think about my research. I hope they would approach it in the way Bruce described by considering the evidence I offered and judging it on its merits. I also hope it would not be thought of as a trend or fashion. This study became part of a long developmental process through which I was able to benefit from the work done by past experts but I could also relate it to the children I teach today, making it relevant to our present society. I hope that practitioners will be able to empathise with some of my writing and to feel I have painted a picture they recognise, perhaps voice some of their concerns and also offer some inspiration and direction for the future.

3.9 Practitioner training

The training of practitioners who work in the early years is a constant bone of contention. In Denmark the pedagogues are trained differently to teachers but the

training is of equal length and status. In this country we have a patchwork of qualifications and levels of training across the early years' sector. Even in the education sector where children work with qualified teachers, these teachers may not have early years training and this can have negative implications for the children as the PIPS (Performance Indicators of Primary Schools) Project indicated (Tymms 1999 in Riley 2007). PIPS aimed to provide high quality data on children throughout their time in primary school relating to attainment, attitudes and progress. One of the most interesting findings from this report was the rapid progress made by children in the Reception year which is their first year in school, now referred to as Foundation Two:

> *"Not only that, but the progress made in the first year of school is the greatest that pupils achieve over the entire seven years of primary education."* (Riley 2007 pxxi)

According to the PIPS study the single greatest influence on the progress made by pupils was the school and the class teacher. This puts huge responsibility on head teachers to employ FS teachers who have the quality of training and experience to help children achieve maximum progress. Schools may miss out if they put the emphasis on those year groups undertaking SATs, possibly leaving the Reception class to be taught by a teacher who has limited expertise in early years but is 'good with little ones'. This highlights the importance of having trained early years' teachers working in the Foundation Stage:

> *"Early years teachers have to be skilled assessors of the children's levels of development so that they can offer a close match of teaching with the children's levels of understanding."* (Riley 2007 pxxii)

Many believe that early years practitioners should all be trained to degree level and there is evidence to support this idea. Finland constantly comes out on top for the educational achievements of its students across the board and in the 2007 results from PISA (Programme for International Student Assessment 2007) out of fifty eight countries, Finnish students were outstanding performers, coming top in science and second in literacy and maths. In Finland all children begin education at the age of seven and before that they have a year of pre-school taught by teachers with masters' degrees. In terms of spending, Finland only spends slightly more on education than the UK; however there are some notable areas of investment:

> *"Teachers must hold a masters degree, requiring five years tertiary study. No university fees are charged and all students get a living allowance, subsidised accommodation and meals."* (Murphy 2008 p29)

Finland is also known for adopting a forest school approach in the early years along with other Scandinavian countries. In the PISA 2007 ranking, the UK came seventeenth in the average band and twenty eighth in maths, also in the average band. When the study was last conducted in 2000, we were fourth in both subjects. To add to the gloom an international literacy study PIRLS (Progress in International Reading Literacy Study (2007) undertaken every five years showed that we had dropped from 3rd to 15th place and our children were more likely than most to:

> *"have a negative attitude to reading, lack confidence in their reading skills and not to read for pleasure."* (PIRLS 2008 p6)

These figures do not indicate a great success for the literacy and numeracy strategies or for the relentless testing throughout our system. Surely we will eventually learn from our successful neighbours and develop a more holistic approach to educating our children. It is a shame that the drive to pass tests in de-coding has left a generation without a love of books. We can see from the Finnish model that practitioners are highly trained; it would take a massive change to bring about this level of training to our early years sector as in this country we are still struggling to get some practitioners through an NVQ Level 2!

> *"There is massive evidence that the highest quality learning experiences for children are provided and implemented by practitioners trained in a rigorous understanding of young children's development and with a deep respect for their inherent learning capacity. A few hours training in how to deliver the EYFS will be no substitute for long term degree status training, which should be at teacher education level and beyond. Our young children deserve nothing less."* (Moyles 2008 p13)

Helen Penn, Professor of Early Childhood Studies at the University of East London quoted a survey from Durham University which looked at the competence of 35,000 children starting primary school:

> *"It concluded that the Labour Government's policy on early years, from Sure Start to free nursery education had made no difference."* (Penn 2007 p39)

The situation surely calls for the government to start listening to the practitioners, and facilitate a bottom up, child centred, not target driven approach. It is clear from international evidence that children do not need to be pushed into full time education at the age of four in order to succeed and in fact they would have a much better experience with far less stress if they were allowed to be children and not targets.

3.10 Summary

In this chapter, I have discussed key aspects linking play, the outdoor environment, the early years curriculum and the role of the practitioner.
This chapter has linked to all three themes, in relation to my first theme - *Children's learning* – I discussed the impact of learning dispositions for children's learning outcomes. I discussed the impact of dispositions for learning on children's outcomes which can thrive in outdoor settings and which came from my observations. These dispositions can lead to success in future learning and to becoming a life long learning. They are valued by many other countries as a basis for an early years curriculum. In relation to my second theme - *The impact of national policy* – I discussed the role of the practitioner in implementing an early years curriculum, including the term pedagogue and how we could take a pedagogical model of good practice for our own practitioner training. In considering the role of the practitioner I have identified the importance of supporting children and scaffolding their learning through play based activities. I have also considered the curriculum implications of offering a play based approach to learning where children are respected as equal partners in the learning process. In relation to my third theme - *The development of the outdoor environment* – I discussed the importance of giving children the opportunity for play based learning to take place in the outdoor environment. I attempted to draw together some of the definitions of play based learning and I discussed some of the people who influenced my understanding of the nature of play. The role of play in the learning process helps children to make sense of the world, it is practical, intellectually demanding and developmental. I have identified the importance of offering children free play which includes time, space and access to resources. I have considered how the outdoor environment provides

opportunities for this type of play to develop and can lend itself to adventurous, challenging play situations where children learn to manage risk.

Chapter Four
The learning context – outdoor education

In this chapter, I set out to explore why it is important to allow children to spend time outside and what it is that makes outdoor education special. I consider my own experiences of outdoor activities with young children and how they have changed and developed over the years. I link this to the changing emphasis and attitudes towards outdoor education which have taken place in this country in recent years. Work in this chapter links to my third – *The development of the outdoor environment.* This relates to gaining a greater understanding of the importance of giving children the opportunity to interact in the outdoor environment through outdoor education.

I discuss the work of Margaret McMillan who set up a garden nursery in London in 1914 and I discuss some of the people who influenced McMillan including Dewey and Froebel. I include the work of people who have had an impact on my thinking, including Bilton (1998) and Ouvry (2000). The positive impact of outdoor education in the teaching of young children has led me to focus on the concept of 'nature deficit disorder' described by Louv (2005) and the impact this may be having on children today as they become increasingly deprived of a relationship with the outdoor environment. This has helped to inform my research and strengthen the case for using a forest school approach as part of an early years curriculum. I expand on the forest school approach as a developing project later in this chapter.

4.1 The great outdoors and environmental education

When I began this study I struggled to find my position in the available literature. I read endless chapters about primary geography, sustainability and environmental education. I was able to pick out odd things that were relevant but I always seemed on the fringes of these books and papers. Most of them focussed on education at key stages one and two, and only occasionally paid lip service to what happened in the early years. I was looking at how young children interacted in the outdoors which sometimes encompassed geography - as when planning a session using the school field. It sometimes included sustainability - when we emptied all the water which had collected in the sand pit lid and transferred it into our water butt to use on our plants. It sometimes covered environmental education - as we were learning *in* the outdoor environment *about* our own responsibility *for* our colony of woodlice under the logs, the snails in the compost bin and the frogs in

our tiny pond. But at the end of the day my study was not based on re-cycling or the big issues of global warming or global citizenship and I had a niggling feeling that it did not fit neatly into any one particular field of study or literature, however bits of it could fit everywhere. I felt as though my study encompassed all the things which underpinned the traditional subject areas such as attitudes, values, skills and concepts connected with nature, problem solving, risk taking, collaborating, creating, investigating, exercising, first hand experiences, sensory experiences, listening and communicating. These *dispositions* and how they can be nurtured in the context of the outdoor environment became a focus for the study, as described in Chapter Three, but I was able to draw on literature from a wide range of fields.

Throughout the period of this study, the cross curricular theme *environmental education* developed into *education for sustainability* and gained in status and significance. The new title linked it much more closely with conservation, recycling, energy, waste, composting, rain forests, endangered species and global warming and had a 'think global act local' appeal. It seemed to move further away from what I was doing through observing the interactions of children in the outdoor environment. At the time when I began my research people who believed in the seriousness or who even believed in the existence of global warming were in a minority. It was a fringe concern and not on the mainstream political agenda. Gradually over the years more evidence confirmed that our earth was getting warmer and it was our responsibility to put it right (Tidy Britain group Eco Schools project 1994). Education for sustainability maintained the focus on education *about, through* and *for* the environment (GB/SCAA 1996). Until recently, education for sustainability had tended to be covered mostly in small patches of the geography and science curriculum but in the past few years, its role has been strengthened (GB/DfES 2006)

In the early years the curriculum guidance stated that settings should provide '*an environment with a wide range of activities inside and outside that attract children's interest and curiosity."* Children should be encouraged to:

- *use their senses, to observe, to find out about and identify living things, objects and events;*
- *look closely at similarities, differences, patterns and change;*
- *observe, find out about, and identify features in the place they live and the natural world;*

- *find out about their environment, and talk about those features they like and dislike*. (GB/QCA 2000 p82)

There does appear to have been a missed opportunity to encourage children to develop a sense of responsibility *for* the environment. It is generally accepted that environmental education encompasses three strands - education *about* the environment, education *through* the environment and education *for* the environment (Palmer and Neal 1994 p19). The ELG's offer the opportunity to teach *about* the environment, including learning about the interdependence of living things. There are clear indications that children should have direct experience of being *in* the outdoor environment therefore learning *through* it. The strand of education *for* the environment, involving the taking of action and making choices is left to individual settings whose practitioners value this aspect of environmental learning. In general, the FS curriculum developed a positive attitude towards using the outdoor environment and settings were encouraged to take an integrated approach to what is provided indoors and outdoors. There was an expectation that outdoor play would be part of every session and that it would be well planned, well organised and give children rich and stimulating experiences. This was exciting news for the Reception year which in the past had been left to join in with the unstructured and often barren outdoor playtime experience of Key Stage One. Teachers in the FS were expected to plan for a wide range of activities in the outdoor environment:

> *"that encourages a positive attitude to learning through rich and stimulating experiences and by ensuring each child feels included."*
> (GB/QCA 2000 p14)

When the EYFS curriculum was published in 2007 a section was devoted to the enabling environment and much more emphasis placed on valuing the outdoor experience:

- *being outdoors offers opportunities for doing things in different ways and on different scales than when indoors;*
- *being outdoors has a positive impact on children's sense of well-being and helps all aspects of children's development.*
- *It gives children first-hand contact with weather, seasons and the natural world;*

- *outdoor environments offer children freedom to explore, use their senses, and be physically active and exuberant.* (DfES 2007 Enabling Environments 3.3)

4.2 The special nature of the outdoor environment

The work of Straw (1990) and Bilton (1998) has been influential in developing my awareness of the extent to which the concept of the nursery garden had declined and its role misunderstood. Straw describes the way in which the outdoor space as a vital place for children to learn had not been taken seriously over the years:

> *"This would suggest that the garden does need to be looked at as an important learning environment for young children, one which offers a method of learning most suited to the needs of children namely learning through movement, play and the senses."* (Straw 1990 p118)

At the start of this research, our team of practitioners began to take a closer look at the interactions of children during outdoor play; it was part of our professional culture to share with each other the things we had observed. We became more and more convinced that our children made significant strides in their development and learning when they used the outdoor space. At the time there was no requirement for outdoor play to be part of the early years' curriculum although most education nurseries did offer outdoor play. Nationally the main focus was on what happened inside the setting in terms of the curriculum and the way the indoor environment was set up. As a team we valued outdoor play and we began a process of enriching what we offered our children and this is still an ongoing process. I considered what it was that made the outdoors such a special learning environment and I found it in the characteristics listed by Ryder (2004) for what the outdoors offers children:

- more space;
- freedom;
- contact with the natural world;
- supports creativity;
- real experiences;
- a wide variety of spaces, places and perspectives;
- a dynamic place full of change and flexibility;
- enriches children's relationships with adults and other children;
- a safe yet challenging place. (Ryder 2004)

In our setting, we observed the importance of a sense of ownership towards an outdoor space. Children did not get a strong sense of responsibility unless they played an active part in using, nurturing, developing and sustaining that place. It was a process of empowering children to take responsibility and make decisions which were sustained over a period of time.

4.3 Nature deficit theory

I became aware of the importance of being outside but I had not fully considered the implications of not spending time outside until I read the work of Richard Louv who challenged the effects of depriving children of opportunities to experience nature. Louv appeared to shift back towards a more traditional interpretation of environmental education advocating children getting out, taking a sense of ownership for their local patch by spending time in it. He suggested a direct link between exposure to nature and healthy childhood development. In his book Last Child in the Woods, he talked about nature-deficit disorder which he defined as:

> *"the human costs of alienation from nature, among them:*
> *diminished use of the senses, attention difficulties, and higher rates of*
> *physical and emotional illness."* (Louv 2005 p34)

Although Louv was an American, many of the experiences he discussed could be related to our experiences here in Britain. For example he talked about open spaces being eaten up by buildings which then imposed strict restrictions on the way children lived in them e.g. no ball games. For children this is giving a clear message that nature is to be seen and not touched. Whilst writing this chapter an item came on the news stating that a council in Leicestershire has threatened to fine parents if they let their children play football outside their homes because residents had complained. Louv focussed on two key issues:

- what is lost when nature fades;
- what is gained in the presence of the natural world.

He pointed out that people seldom valued what they could not name and he identified a British study which showed that eight year olds knew more about the Japanese Pokémon characters than the native otter, beetle and oak tree. (2005 p33) This is part of our culture and heritage which seems to have been neglected in recent years. In literature and art, nature is often linked to feelings of well being but it is relatively recently that science has been used to identify the link. Many children view nature from the world of the television. I wondered if by watching the

news, children associated nature with natural disasters such as tornados and floods. Did our children have the opportunity to become sufficiently attached to nature to want to become the stewards of the future?

Exposing children to nature means exposing them to something which may be around infinitely longer than them and this concept can give children a sense of awe and wonder e.g. when planting a tree. It also establishes a sense of time in the natural world which is different to the time keeping of their everyday lives. Just as children on a car journey keep asking "are we nearly there yet?" so children engaged in environmental work such as seed planting will, in my experience, often ask "has it grown yet?" or "is it ready to eat yet?" They have to learn that things take time to grow and some things take a lot longer than others but to give the plants a best chance of growing they can help by weeding and watering. Children also have to come to terms with disappointments such as the time we had a very wet summer and it washed away much of their seed planting or the very dry summer which shrivelled up all their beans and pumpkins. Children need to interact with nature before they can understand the importance of conserving it. Understanding nature requires a child to spend a sustained amount of time outside; this is not the same as a quick play on a climbing frame or kicking a ball around. It means engaging with nature, listening to it, touching it and observing the changes in the seasons. My research has shown how children take ownership of a space if they have a first hand experience of establishing or caring for that space and by taking ownership they develop dispositions, skills and attitudes which support all future learning. (see Fig 4.1)

The type of outdoor environment Louv advocates is the natural landscape and not concrete playgrounds with a flat piece of grass attached. A natural landscape could include rocks, trees, logs, slopes, mud, rich vegetation and a wide variety of wildlife. Garrick (2004) describes a Norwegian study (Fjortoft 2001) which found that children who had regular periods of outdoor play in a natural landscape demonstrated better motor ability, balance and co-ordination, compared to children who just had access to a traditional outdoor play area with standard play equipment. Nutbrown (1996) describes a Copenhagen kindergarten garden as exciting and beautiful, with ropes in trees, huge sandy areas, planks of wood, crates, tyres and garden sheds full of equipment for children to access.

NATURE DEFICIT

Growing obesity and sedentary lifestyle

DE-NATURED CHILDHOOD

Criminalization of play

More time spent in front of the TV, computer game, internet
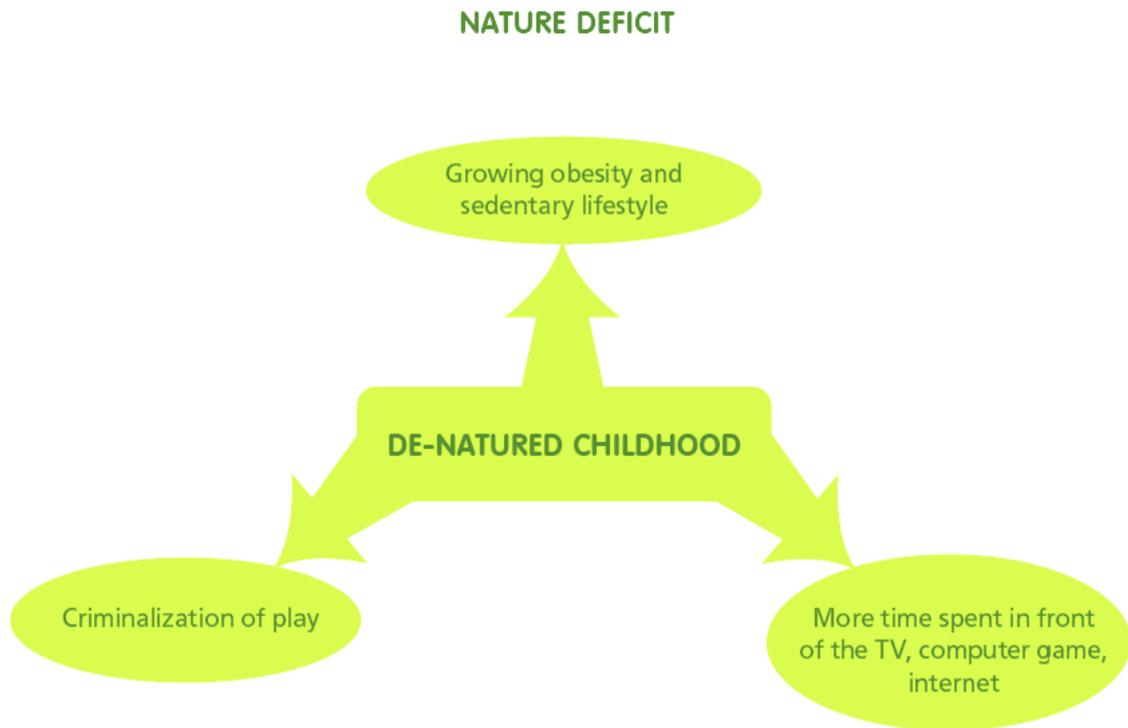
Fig 4.1 De-natured childhood

Researching the impact of decreasing exposure to the outdoors will never be easy as there are so many different variables to consider but Louv highlights some of the evidence which seems to indicate certain potential negative outcomes for children. This includes the work of Frank Wilson a neurology professor at Stanford University School of Medicine USA, an expert in the co-evolution of the hand and brain who found it harder to teach students about the heart because the students had never fixed a fuel pump or siphoned liquid and asks – 'Are we cutting of our hands to spite our brain?', we need to learn by doing, making and feeling. Our computer age is possibly depriving children of first hand outdoor experiences which then impacts on their ability to learn. It is not the fact that the computer exists that is the problem; it probably has more to do with adults (including parents and teachers) not compensating by making alternative opportunities for children to spend time outside. (see Fig 4.2)

Sensory experiences aid learning. The natural environment is the principle source of sensory experiences.

Children surrounded by nature are less stressed.

Children today have less general exercise.

More organised sports activities

NATURE DEFICIT

Watch more TV & play computer games.

Children today have a more sedentary lifestyle.

Children are unlikely to feel responsible for something they have not developed a sense of ownership for. A sense of ownership comes from first hand experiences.

Children who spend more time outside, are fitter and have less illness.

Fig 4.2 Nature deficit for children today

4.4 The effect of the outdoor environment on well being

Howard Gardner developed a theory of seven multi intelligences in 1983 but he later added an eighth intelligence – the naturalist intelligence, which he claimed would be applied to people like Darwin who had a special ability to learn *in* and *about* the natural world (see Appendix 9). When we work with children outside, some are tuned in to outdoor learning straight away, perhaps having this kind of intelligence, whilst others take time to develop an understanding of how to learn outside. Eventually, in our setting, all of our children became effective outdoor learners during their time spent in our forest school experience within our school grounds. (see Fig 4.3)

A UNIQUE LEARNING ENVIRONMENT:
- No two settings are the same.
- Changes in the seasons.
- Changes in the weather.

THE OUTDOOR ENVIRONMENT

MOTIVATING FOR CHILDREN:
- Impacts on the way children behave.
- Boys need lots of space for 'big' play.
- Inspires different types of play.

OFFERS OPPORTUNITIES WHICH MAY BE LIMITED INDOORS:
- Use of natural materials.
- Risk.
- Space.
- Sensory experiences.
- Social challenges.

Fig 4.3 The outdoor environment – a unique place to learn

Some of the children who benefited the most were often the ones who were experiencing difficulties in the indoor environment. Perhaps the fact that there was more space, more freedom, more fresh air and exercise, more opportunities to follow personal interests and ideas in an environment which reduced stress, led to these children making better progress than they had done inside. Working outdoors may have given these children a feeling of well being which had a positive effect on their learning and behaviour. Kim Thomas (2005) linked Louv's nature deficit theory with the increase in cases of ADHD and the increased use of the drug Ritalin to calm over active children. Thomas said that while some people were cautious about making a link, there was a strong consensus that it was important for children to spend time outdoors as a vital part of their development. I believe that added to this statement should be the words "regular" and "sustained" because it would be all too easy for a school to offer a week's camp in a natural environment

for a particular year group and then consider that the outdoor 'box' had been ticked. It is the day to day, week by week, month by month seasonal changes that make such a strong impact on the way children develop and on their sustained sense of well being. Of course educational visits in the natural world are vital and should be part of all schools' enrichment programmes but local outdoor access should not be described as "enrichment"; it should be a basic requirement for all children:

> *Although there is often pressure from parents and government to focus on academic skills at the expense of play, there is good reason to believe that, in the long run, professional instinct will turn out to be right.*
> (Thomas 2005 p14-15)

In recent years, the tide has begun to turn and certainly parents in our setting are increasingly worried about academic pressure and the stress young children experience in school. They have become increasingly supportive of time spent outside. (see Appendix 11) Unfortunately funding tends not to follow free play this makes it an uphill struggle to provide children of all ages with good free play opportunities in the outdoor environment.

Louv refers to research by Rachel and Stephen Kaplan (1993 in Louv 2005 p102) on the effect on people of being in the outdoors. They found that just being in a natural environment had a restorative effect on people and that too much directed attention led to what they called "*directed attention fatigue.*" This research is supported by Hartig (2001 in Louv p103) who compared the response of attention fatigued people in different recovery settings:

- the outside natural environment;
- the outdoor concrete environment;
- the indoor environment.

Those tested in the natural setting attained the highest test score for the most improved attention span. The implication for education is that playtime / breaks should take place in green spaces to maximize concentration and relieve stress. I can empathise with this idea as most of this study was written in two places. The first was my conservatory overlooking the garden and the second was my caravan overlooking fields. I chose these places because they helped to motivate me to write and kept my head clear to think. I found the process much more difficult when I had to sit inside surrounded by four walls. According to an English Nature

report (2003) - now Natural England - there is a connection between mental health and a love of wildlife. Connecting with nature brings improvements to spiritual, mental and emotional health (Moss 2007). These research findings run counter to the trend for reducing time for children to relax, especially outside, in primary and secondary schools. Wainwright (2007) refers to a school in a poor area of Leeds that was attempting to improve standards by, amongst other things, reducing the summer holiday and by reducing breaks thus keeping free time to a minimum. The head teacher is quoted as saying: *"A lot of children dread break - it's when they don't feel safe."* Removing breaks as a solution to this problem seems to rather miss the point. It is likely children will perform less well because they do not have a stress free break. The school would have been better finding ways to make break time a safe and positive experience for all. The Leeds school is yet another example of how the key resource, the outdoor environment, which could help children learn and develop and which is readily accessible, is simply not recognised or understood by those in positions of responsibility. (see Fig 4.4)

A UNICEF report (www.unicef-icdc.org) shocked people in this country when it stated that children in the UK ranked bottom of twenty one nations across Europe for children's emotional, physical and educational well-being. This report focussed on the experiences of eleven, thirteen and fifteen year olds and looked at issues such as friendship and family life. At the same time that UNICEF issued its report on the UK's unhappy children another report came out based on the forest school approach where children spent regular and sustained periods of time outside. (www.forestresearch.gov.uk). This report showed how children flourished in an outdoor environment which gave them control over their actions. In the forest school approach children were expected to take responsibility for their actions, to manage risk and to make decisions. Lindon (2007) said that the experience produced children who lived and breathed emotional and physical well-beinng.

Being outside gives a feel good factor.

If achildren not exposed to risk they never learn how to manage it.

Stress linked to decrease in access to outdoor environment.

Being outside helps to relieve symptons of depression. A couple of hours a week on the internet increases the risk of depression Louv 05 p65

The visual environment plays an important part in our well being.

Fig 4.4 Linking stress to a decrease in access to the outdoor environment

It is not possible for me to prove the negative effect of not being in contact with nature but through my research and close observations of children in my setting, I can demonstrate the positive impact of spending time outside. I have observed the impact of allowing children to take ownership of an outdoor space. Establishing a forest school approach within our school grounds has been very successful and has brought together many of the positive qualities our team of practitioners have identified as necessary for children to become inspired, curious, life long learners. Children always remember what they did last time at forest school and want to

re-visit or expand on the activity next time. They also report back to parents about their forest school experiences and we have found parents to be very supportive of the approach as they wanted to get involved themselves:

> " *In my children's memories the adventures we have had together in nature will always exist"* (Louv 2005 p310)

4.5 Other theories relating to the importance of nature and the natural environment

Louv is not alone in advocating the importance of nature to the child. There is an increasing number of researchers voicing their concerns. Wilson (1984 in Louv p43) defined the term *biophilia* as:

> *"the urge to affiliate with other forms of life"*

Biophilia describes humans love for and their need to have contact with the natural world and stems from a biologically based affinity with the natural world which comes from our past hunter gatherer ancestors. The new discipline of ecopsychology relates to our evolution on earth and gained prominence through the work of Theodore Roszak (1992). He argued that we had repressed our ecological unconscious that connected to our evolution on earth:

> *"Ecopsychology and all of its budding branches, reinforcing Wilson's biophilia hypothesis, have fuelled a new surge of research into the impact of nature on human physical and emotional health."* (Louv 2005 p44)

The space available for children to connect with nature, known as the "radius of activity", has decreased in recent years and according to Moss (2007) it has declined by almost 90% since the 1970's. Moss talks of the need for children to re-connect with nature and mourns the passing of opportunities for children to lie in a field listening to the wind and watching the clouds go by. I am thrilled to report that we do just this as part of our outdoor education and I expand on my experiences later in this chapter. Moss (2007) suggests that for this generation nature is more abstraction than reality, it is something to watch, consume, wear or ignore.

We are also becoming more aware of the importance of the visual environment on our well being. Hospital patients who recover with a natural view to look at make better progress than patients who look at blank walls (Louv 2005). A room with a view of nature can also protect children against stress and this has implications for the way we build and design our classrooms and nurseries.

4.6 Spirituality and the outdoor environment

Another aspect of the 'feel good factor' of spending time outside can come from a spiritual dimension:

> *"Spiritual development is concerned with awareness of self and awareness of others, the relationship between the child and others, and his growing appreciation of being alive."* (Yardley1974 p75)

In providing for a child's development, we tend to think in terms of his body and mind and the learning environment is designed to satisfy the child's physical, intellectual, emotional and social needs. Many teachers acknowledge other needs which are essential yet difficult to define and often referred to as spiritual:

> *"Sometimes we may glimpse the child's growing spirit, and when this happens we are filled with humility and respect."* (Yardley 1974 p75)

Children who cannot connect with their natural environment do not grow to respect it, appreciate it or find a spiritual connection with it. With spirituality comes respect and appreciation whether it is for the natural environment, animals or for fellow human beings. Spirituality is a difficult concept to define yet it appears in the EYFS (DfES 2007):

> *"children's health is an integral part of their emotional, mental, social, environmental and spiritual well being and is supported by attention to these aspects."* (GB/DfES 2007 Health and Well Being 1.4)

The problem with defining spirituality is that it is connected with a non tangible part of the body referred to as the soul and which is an experience that is very personal to each individual. Each person has to find their own spirituality so the role of practitioners is to provide possibilities and opportunities for this to happen. Spirituality seems to offer inner calm and peace which not only leads to a feeling of well being but also helps the individual cope with times of stress. Spirituality may

or may not be linked to religion but it is commonly associated with faith. Spirituality is also often linked with the natural world as this is seen as a place where individuals can find inner peace and connect with their environment and benefit from a feeling of well being. I felt that spirituality was an important reason for all children to spend extended periods of time outside and I could not let go of this notion until I had explored the issue in more depth. It was a difficult issue because the personal nature of the concept made it harder to understand and evaluate:

> *"The spiritual context relates to the child's need to create an increasingly coherent narrative about themselves. The child then needs an environment where she can explore those big questions of meaning, an environment which accepts and supports feelings of joy and of sadness in the face of birth, loss and death. Opportunities are needed to develop skills and confidence to deal with interpersonal dilemmas and conflicts, and exposure to a wealth of cultural images and stories through which a child can find herself reflected in the life of the classroom."*
> (Brooker & Broadbent in Riley 2007 p59)

The spiritual aspect of connecting with the outdoor environment contributes towards a feeling of well being. Froebel was well known for his spiritual ideals connected to the kindergarten and his focus on the garden as a key to a child's spiritual development has contemporary relevance. (Garrick 2004) Every child should have the opportunity to experience well being as part of their daily life experience. This idea is backed up by the Every Child Matters statements under '*Enjoyment and Achievement*' (GB/DfES 2004)

Straw talks about the decline of outdoor play at the start of the 1990's saying that children were restricted by time, the weather, lack of planning and equipment, lack of structure in the environment with adults supervising rather than interacting in children's play. She said although outdoor play may still happen, it was:

> *"often in body, and not in spirit."* (Straw 1990 p118)

Dowling (2005) describes spirituality as a journey through life:

> *"in the deepest sense, particularly special moments, and recognising our own inner resources to help us cope with the journey."* (p18)

She goes on to say:

"The outdoor environment is potentially a very rich area for independent and spiritual growth. Many early years establishments take great care to create interesting and beautiful outdoor areas, even in a small space. Forest schools go just that step further." (Dowling 2005 p7)

Our experience of the forest school approach has certainly taken us a step further in developing a sense of spirituality for our children.

4.7 Our children have lost freedom and lost control of time

The erosion of time and freedom to play is not an entirely new phenomenon. Back in the mid 1700's Rousseau encouraged educators not to set strict time limits on children's activities. Rousseau said that time belonged to the children and was not for adults to take over and direct on their behalf. Children should set the pace not the adults. This practice is seen in the Scandinavian forest schools today. However for most pre-school settings clock time has become the norm and the session is structured by a timetable. Natural time such as day and night, the changing seasons linked to the role of the elements of earth, air, fire and water have to be brought inside and taught for children to grasp the concepts.

The concept of time can vary according to culture; in our culture time is constructed *for* children and not *by* children. Time and control seem inextricably linked, the less a child controls their own time the more others control what they do and how they do it.

Given the extent of the evidence supporting the use of the outdoor environment as a resource for learning and the benefits it can offer in terms of mental health and well being, I hope this study will promote a passion for nature and an environmental awareness that can inspire and enrich a child's education. This is done by promoting the attributes of co-operation, risk taking and independent learning that happen so naturally outside, along side freedom from adult control, individual responsibility and the aesthetic peace which grows when children really use an outdoor space.

4.8 The history of the nursery garden

Central to my research into how children use the outdoor environment and the contribution it makes to their learning and development, is the concept of the nursery garden. Nursery education has been part of a slow developmental process

in this country and the garden has been a unique feature of this process. Friedrich Froebel (1826) strongly advocated using the outdoor environment as a base for learning and of learning through play. Froebel had spent some time studying with Pestalozzi and had been impressed by the walking parties they went on together:

> "These walks always afforded opportunities of drawing close to nature, even when this was not the purpose of the walk." (Lawrence 1952 p19)

Froebel advocated that knowledge of the natural world was indispensable for an educator. He advocated young children learning through play and he developed a series of apparatus which became known as "gifts and occupations" to develop play. These activities included sand, clay, blocks for building, pencils and paint, paper folding, cutting and weaving as well as action songs and singing games. At a conference in 1884, a paper presented by a Miss Manning about the Froebelian approach stated:

> "The teaching is not direct instruction. It trains the senses and the observation powers through handling and doing. It exercises the muscles and limbs, it takes advantage of the imitative faculty, it appeals to the fancy by means of stories and talks, it works through affections, it draws forth helpfulness and self-respect." (Lawrence 1952 p57)

Froebel's notion of the kindergarten literally meant *child's garden*. Moriarty (1998) suggested that nursery education is a "horticultural paradigm" because it clusters together theories, practices and organisations in characteristic ways that link to plants and gardens such as a nursery as a place where immature plants are tended. Children need to be nurtured to maturity in the same way. Froebel used the garden as a base for learning because it could incorporate physical activity with cognitive development. He believed:

> "the human being to be an organic unity between mind and body, but with the mind as the formative agency." (Moriarty 1998 p14)

The work of Froebel has been continued through the Froebel Educational Institute which produces information on the ways in which knowledge is acquired by young children both in the home and school situations. His work influenced other pioneers of nursery education such as Margaret and Rachel McMillan. They believed that play was a vehicle for education and that children should be in close touch with

nature. Because of these beliefs and the need to make significant improvements to children's health, the McMillan's nursery was based in the garden with some shelters built for support:

> *"to move, to run, to find things out by new movement, to feel one's life in every limb, that is the life of early childhood. And yet one sees dim houses behind whose windows and doors thirty to forty little ones are penned in Day Nurseries."* (McMillan 1930 p23)

It was 1914 when the council granted use of a site in Deptford, London for the McMillan sisters to set up their first garden nursery. Provision of nursery education was included in the Education Act of 1918 but later dropped due to a shortage of funds. However Margaret McMillan canvassed local authorities in England to open nurseries. The Froebel society assisted in the campaign and by 1933 there were thirty two nurseries maintained by local authorities and twenty seven voluntary aided. Also in 1933 came the third Hadow Report which addressed Infant and Nursery Schools. It declared the best place for children under five was in the home but it acknowledged that for many children bad housing, overcrowding and lack of parental knowledge often made the home an unsatisfactory place to learn. (Hartley 1993 p50) In 1967 the Plowden report focussed on similar issues of welfare calling for nursery education to be expanded in areas of deprivation which became known as Educational Priority Areas (Hartley 1993). The focus of reports such as these placed the emphasis of nursery education onto compensating for deprivation rather than universal pre-school education in the interests of all children. The McMillan's original garden nursery was set up to address deprivation and the Plowden report endorsed their influence. Plowden did however extend provision introducing the part time places which are still the entitlement for the majority of children in maintained settings today. Gradually the nursery garden evolved into a mere support to a main nursery building which seemed to happen for a number of reasons. As the general health and welfare of children improved people did not think it was so important to keep children outside and as it was cheaper to adapt classrooms into pre-school provision rather than to build from scratch, the space and shape of the garden took on a supporting role. Although the legacy of the McMillan's was focussed on areas of deprivation their ambitious aim was for all children to benefit from nursery education acknowledging that all children would benefit but in different ways:

> *"Children are malnourished, eat the wrong things at the wrong intervals.*
> *Life for many children is so inert and so unwholesome that they do not*
> *digest well. This is true of many well cared for children behind model*
> *dishes in model schools as well as the poor and neglected. They sit about.*
> *They are over-clothed. They do not run and shout in the open. They sleep*
> *in stuffy air."* (McMillan 1919 p50)

Margaret and Rachel McMillan had a lot to teach us about good practice in early years' outdoor education and Margaret believed that sense training was fundamental to the learning process:

> *"She deliberately set out to create a new system of sensory training in the*
> *natural environment, in her garden."* (Bradburn 1976 p53)

Their garden activities included paddling pools, home corner equipment and dolls, music, painting, craft activities, stories, dressing up clothes and trees for shade. There was climbing equipment, a herb garden, a kitchen garden and a wild area as well as slides, ropes, swings, ponds, animals to care for, digging pits, habitats for wildlife, bricks, blocks and planks. Gardening tools, wheeled toys including bikes and trucks, real tools, sand and water, tables, chairs and benches were also dotted around the garden, it sounds wonderful.

The McMillan sisters set out to improve the health, social and educational influences on children both inside and outside the nursery setting. At the time there was a limited number of studies on young children in terms of child development and how children learned and this made their philosophy of nursery education a remarkable achievement. There garden became a place of learning for the children and a place of learning for the adults who were teaching them.

> *"The nursery garden was designed as an arena within which scientific and*
> *political ideas about childhood, in particular working-class childhood, might*
> *be explored.* (Steedman 1990 in Garrick 2004 p20)

When Margaret McMillan started her work many people failed to see the connection between mind and body, seeing them as separate entities. Margaret and Rachel saw each child as an individual " *...a unique being, a person of infinite worth and*

one to be respected and reverenced" (Bradburn 1976 p53). They took an holistic approach to education.

4.9 The McMillan's vision V the compensatory culture

It would have been easier for Margaret and Rachel McMillan to focus on the health aspects of child poverty but they had a much wider agenda which was far sighted for their time. They saw physical and emotional wellbeing as prerequisites for a child's intellectual development. (Garrick 2004) In the nursery garden the children were engaged in self-directed activities and free play. Within this informal atmosphere they believed that children needed more than just incidental teaching so direct instruction was also required. Margaret believed that early years' experiences would have a crucial effect on a child's later development and life chances. She must have felt a very lone voice at the time. McMillan laid the foundations for future early years education by using the term "nurture" meaning fostering physical, social, emotional, intellectual and spiritual development of the child. These areas of development have been the foundations for the early years curriculum in a range of different settings ever since. Margaret McMillan said:

> *"Suppose you want to develop the touch sense! lo! here are a score of leaves, hairy sunflower, crinkled primrose, glossy fuchsia, and the rose. Do you want to compare colours, to note tints and shade? Well, here is wealth a plenty. The herb garden will offer more scents than anyone can put into a box, and a very little thought will make of every pathway a riot of opportunities. Not, of course, that we do not use type apparatus. Not that we have not colour tablets here, and also insets. But what are these if they are to be used only in classrooms, and we are to be familiar only with cupboards? No, let us get out while we are little."*
> (McMillan 1925 p4 in Bradburn 1976 p57)

As an early years educator I feel a sense of responsibility towards the pioneers of early years' education who devoted their time to developing a curriculum that reflected the teaching and learning needs of young children in an age when the education of pre-school children had previously been given little consideration. Early years education has too often been saddled with a compensatory agenda and we have been inundated with American style programmes designed to raise children out of disadvantage by filling the gap with a target driven, systematic response and with schemes such as Sure Start which were set up to compensate for the disadvantaged backgrounds of children in poor areas of the country. The

McMillan sisters believed you could not separate a healthy mind and a healthy body but the success of their programme to create a healthy body seemed to overshadow other aspects until gradually nursery education was seen as a compensatory measure promoting good health among the poor inner city children. Today we still have a mixture of maintained and voluntary sector settings. I do not agree with Moriarty (1998) that McMillan was simply a woman of her time and not a visionary. She was influenced by other writers and thinkers and no doubt gained much of her knowledge and beliefs from her reading but she was also a woman, at a time when women had no political voice, and she stood up to the men with power for what she believed in and her work has stood the test of time. She advocated joined up services for children and their families. Contemporary centres of excellence such as Penn Green offer community education, health resources, adult education and a family centre all on one site. The government Sure Start initiative also aspires to provide joined up services. Children's centres sprang up in areas of deprivation to offer a single point of access for services for children:

> "When Margaret stated publicly that children needed to be nurtured in schools, she took an unpopular line." (Bradburn 1976 p111)

McMillan's views on the importance of nurture were not well received by teachers but she had no patience with their criticisms:

> "They are not going on to lead us, but only to find simplified ways of spelling? The teacher of little children is not merely giving lessons. She is helping to make a brain and a nervous system, and this work which is going to determine all that comes after, and requires a finer perception and a wider training and outlook than is needed by any other kind of teacher."
> (McMillan 1919 p175 in Bradburn 1976 p111)

What a responsibility this presents to early years practitioners. This statement re-enforces the idea that early years' education forms the foundation for everything that follows. This is a responsibility that nursery practitioners have always been aware of. Many governments have failed to see investment in early years as a priority and they have paid the price as a consequence by having to put money into "booster classes" and special needs support throughout the primary and secondary years. This has created a compensatory culture in education. Commonly heard expressions such as "there is nothing new in education" and "what goes around comes around" increasingly rings true. It is the people who are

new, not the ideas, but we continue to fail to learn from the past with each generation seeming to need to discover things again for themselves. Margaret McMillan set out to create structured education provision, including teacher training that was grounded in the needs of the child as a whole person. According to Bradburn (1976 p54), her three mains goals were to nurture children, to aid parenting and to provide a working model for education. Moriarty (1998) considered that for McMillan, the garden was an intrinsic part of these aims by creating a learning environment which gave children freedom of movement. By taking this holistic approach she was not intending to develop a watered down version of the infant school but to create a new child centred approach to the education of young children. Margaret was developing a child centred curriculum which moved away from the "one size fits all" model of the elementary schools. The work of McMillan seems to tie in very well with the present governments wish to see individual learning programmes for children of all ages across our education system:

> *"P arrives from Stepney, comes in as clean as a flower and as warm as toast. She is also very intelligent, because her mother has developed her mind by every kind of device. Do we stop all this splendid work? No. We carry on when the mother is busy in other ways. And our beautiful little Tom aged two, whose mother does not read, but window cleans at irregular intervals. We have to give him a bath on entrance (to his boundless joy) and dress and train him up to P's level. In short, we have to give nurture in the nursery, and to measure the amount of it according to the need of each child."* (McMillan 1919 in Bradburn 1976 p70)

4.10 Using the McMillan approach at Richard Bonington Nursery

In recent years at Richard Bonington Nursery we have attempted to integrate the indoor and outdoor curriculum. Inside the nursery we had an area for imaginative play, which was taken outside in a variety of ways, such as making a den with drapes over the climbing frame or using the planks and large boxes to build a train. In contrast to bring the outdoor environment indoors we made a wormery as part of a mini-beast topic, watched a butterfly hatch and dry out its wings, collected flowers from our garden for still life drawing, set up a frame tent for imaginative play and collected herbs for a sensory collage. We adopted a number of strategies to try to achieve this link between the indoor and outdoor environment and this included studying the original garden areas created by the McMillan sisters in their first nursery in Deptford as defined by Straw (1990 p112):

- *"horticulture;*
- *scientific and environmental discovery;*
- *play;*
- *building;*
- *gymnasium."*

We listed the activities that would fit into each of these areas and realised they were just as relevant today as they were in the early 1900's so we used this as a framework for our outdoor play policy. Each day we tried to ensure that we provided at least one activity for each of these areas. Having used the strategy for a number of years it proved very successful in offering a broad and balanced outdoor curriculum which was compatible with our daily planning.

Moriarty (1998) believes that McMillan took her philosophy from reading about educators who developed the mind through sensory and muscle training. McMillan was keen to test out theories for herself and engaged in research based at the nursery. In the same way, at Richard Bonington Nursery we constantly carry out small research projects to test different ideas and to challenge our thinking. McMillan, for example, enquired into whether developing gross and fine motor skills would lead to the development of cognitive skills. Today I find some confusion between active learning and a sensory approach to learning - the Nottinghamshire Advisory Service advocated active learning in the teaching of phonics in the nursery but the examples given involved children sitting in groups around a whiteboard ensuring all of the group made noises and actions during the session. Is this really active learning?

4.11 Changes in the status of outdoor play

When I began this study there was no requirement to include outdoor play as part of the daily experience for nursery children although most educational nursery settings had an outdoor play area which they were expected to use and it was perceived as good practice to provide stimulating outdoor play. An example of the range of experiences of outdoor play can be found in Hartley (1993). In the mid 1980's Hartley observed the use of outdoor play in three different nursery settings. In one nursery, children hardly ever went out to play because the staff felt the play area was not safe to use, at the second nursery children went out most days but the play was structured around a small number of set activities including wheeled toys. At the third nursery, there was space to dig and plant and this nursery

allowed inside and outside activities to flow, including bikes being brought inside. These three examples demonstrated the diversity of outdoor play opportunities in educational settings at the time.

The survival of good quality outdoor play has largely been due to the commitment of practitioners to offer children a wide range of exciting play opportunities which were passed down over the decades from one practitioner to another. Practitioners always observed the need for children to learn outside and therefore responded to the child's enthusiasm by encouraging outdoor play. In the majority of nursery settings outdoor play equipment tended to be tightly packed into a shed and consisted mostly of physical play activities such as climbing equipment, wheeled toys, balls and maybe a sand pit and planting area. Over the past ten years, this has changed significantly in many settings, due to the work of people like Ouvry (2000) and Bilton (1998) and there has been a re-discovery of the value of outdoor play:

> *"Children need the opportunity to both learn to move and move to learn. Much has changed since the beginning of this century, but it would seem that a nursery garden offers just as much to the child of the late 20th century, as to the child of the Victorian period."* (Straw 1990 p118)

Practitioners are increasingly offering the same curriculum opportunities inside and outside and more recently organising as much time as possible for free flow between the two. My experience of free flow has been that, unless the weather is particularly bad, the majority of children in our setting opt to go outside which demonstrates the power of outdoor play for children:

> *"Outdoor space, even if it is only a small area, allows and encourages children to relive their experiences through their most natural channel: movement."* (Ouvry 2000 p11)

Despite a history of a lack of interest in outdoor play at government level, the nursery garden or use of outdoor play space has managed to survive as a prominent feature of educational nurseries.

4.12 The role of the practitioner

In the past, outdoor play was mostly child initiated and the role of the adult varied depending on the setting:

> *"Practitioners often feel confused about their role when they are outside, finding it difficult to decide whether they should be police constable, referee, observer, safety officer, assessor, arbitrator or instructor. To a certain extent the answer is that, out of doors, practitioners fulfil all of these roles and the skill is to respond to the children using whichever "persona" is appropriate to each individual child and each individual situation*."
>
> (Ouvry 2000 p82)

In some settings, the adult's role in outdoor play was to put out equipment and to keep law and order, particularly over the wheeled toys, to ensure safety and encourage children in their play by providing props, equipment and conversation. In some settings the adults did all of the above but they also joined in with the play, extended it by talking through possibilities or adding resources to move the game along. In these settings the adults acted as role models and talked about what was happening. They discussed the day's play with other practitioners to help the planning for the following day so that groups and individuals could continue to develop their outdoor play. These practitioners were the best role models for advocating how to develop a child's learning in outdoor play and they came from a long history of skilled practitioners in outdoor education. There is much more to it than wandering around holding a cup of tea as seen in a primary playtime situation. Ouvry described the skill involved in being a good outdoor practitioner:

> *"Participating with children in spontaneous play, talk and exploration is what should take up most of a practitioner's time outside. A sound knowledge of how children develop, their individual needs, and the experiences we need to offer children to help them think further informs our practice outdoors and affects the quality of interaction. There's a lot going on in our heads all at once."* (Ouvry 2000 p48)

The expectations of a practitioner's role in outdoor play changed throughout the 1990's as the demand for outdoor play in the curriculum was formalised. At first sight making outdoor play a curriculum requirement seemed to be a great step forward as at last the value of children spending time learning outside was being officially recognised. This was reflected in the FS curriculum and through the inspection process. The value of offering the same curriculum inside and outside was highlighted in policy documents. Unfortunately the inspectorate seemed to

interpret good practice in terms of practitioners taking formal learning situations which they had observed inside, into the outdoor setting and at the same time de-valuing the beautiful imaginative, creative, social play that had previously been happening.

In many settings, it has not been unusual for children in a reception class to be marched outside for half an hour of action songs and singing games as though that somehow constituted outdoor play. Throwing beanbags into numbered hoops or writing names in chalk on the floor was labelled as "play". I observed a maths inspector take a group of four year olds outside for half an hour to learn about position. They stood at different directed points to make shapes like rectangles and triangles. The children then had to change places and remember where they had been and change back. The group then returned inside and the children had to use animals to re-enact the positions they had been standing in outside. The whole learning process was controlled by the adult who thought it was a great inter-active, multi-sensory, problem solving task, when in fact most of the group did not grasp the intended concept and only the ones with a good memory were able to follow the instructions. At this time, there was no requirement for inspectors to have any real understanding of early years' philosophy and practice or training in that phase of education. Many reception teachers were primary trained and lacked a specialist academic grounding in early years' education:

> "Being busy all day can mean a programme of adult-directed activities that limit the freedom which outdoor play allows." (Ouvry 2000 p15)

Practitioners with quality early years training could see what was happening and managed to please the inspectors while still holding fast to good quality outdoor play when they were not under the microscope. There is of course a place for planned activities outside and practitioners have always used these to good effect but it always seemed that when a new initiative was launched it was taken to the extreme before settling down to a sensible level. Gradually the tide began to turn and from about 2005 onwards pressure was introduced to make free flow between inside and outside last for a significant part of each session. This inevitably allowed child initiated and supported play to increase once more.

4.13 Requirements for effective learning, past and present

Debate continues about the long term value to individuals and to society of nursery education but Margaret McMillan had no problem in appreciating the importance of

good quality early years experiences and she valued creative opportunities and the development of the imagination. She also saw language as a key part of the "nurturing" process and involved children in labelling everyday objects and to recall what they had seen. She encouraged children to reflect on a visit, giving opportunity to widen their vocabulary and appreciated that effective learning took place in a relaxed atmosphere where children were not under pressure but were self motivated. McMillan believed that teaching should match the needs of the individual, with adults planning for each child's learning. This matched our present government's push to provide children with individual learning programmes, not just in the nursery but across all schools for all children. I expect this will be hailed as a great new idea! Bradburn says of McMillan she saw that the role of the teacher in the nursery school was to provide the right atmosphere and opportunities for children's learning and growth as well as to wait for and anticipate a good teachable moment.

McMillan wanted to establish a broad basis for a lifetime of learning and her requirements for effective learning can be seen throughout her work and could be summed up under the following points:

- *children initiating activities which promote learning and enable them to learn from each other;*
- *children learning through movement and all their senses;*
- *children having time to explore ideas and interests in depth;*
- *children feeling secure, which helps them to become confident learners;*
- *children learning in different ways and at different rates;*
- *children making links in their learning;*
- *creative and imaginative play activities which promote the development and use of language.*

Remarkably these are points for effective learning in the early years set out in the guidance document for the FS (GB/DfEE 1999).

It is easy to see the influence of McMillan in the EYFS curriculum but in looking at the recent climate for education set by a government motivated by target setting, we still seem to have a very narrow agenda for a child's all round education. I found myself increasingly frustrated by the reality of sitting through inservice training days on the numeracy and literacy strategy when I wanted to be inspired by good early years practice. My frustration continued as I watched my son, at the age of five struggle to come to terms with starting school. It was difficult to watch, as he was subjected to a strict regime of spending long stretches of time sitting on

the carpet, followed by an activity at the table and then back to the carpet for the compulsory plenary session. Despite the best efforts of his teacher, who was an enthusiastic and skilled practitioner, the system, not the teaching was letting him down. Learning through play was being squeezed out of the equation - no more sand, water, bricks, home corner or free play for our five and six year olds as the achievements and aspirations of Margaret McMillan slipped further from the reach of this generation of young children. There is some hope for the future, when Ofsted (2008) looked at outdoor education across the whole school range they found it contributed significantly to raising standards and improving pupils' personal, social and emotional development. The final report called Learning outside the classroom stated in its recommendations that the DCSF should:

> *"reinforce the message to schools about the value of learning outside the classroom and support its appropriate use more widely across its programmes."* (Ofsted 2008)

4.14 The influence of Dewey

As well as being influenced by the Enlightenment thinkers, McMillan would also have read the work of John Dewey who focussed on a child centred, problem solving approach to learning and was one of the founders of child centredness. His position was based on the writings of Rousseau, Pestalozzi and Froebel. He saw the child as an original thinker and he saw problem solving as the key to intellectual life. It was the process that was more important than the product in stimulating the mind into action. Dewey assumed that all children had a natural impulse to investigate and experiment and had a social impulse to co-operate. Critics would argue that not all children have these qualities and only children with these qualities would succeed under the Dewey system. He believed the content of education should have application to the lives of those involved:

> *"An organism, initially at ease with its environment has a problem, such as lack of food. After useful activity on its part the difficulty is overcome, and the organism reaches a new state of equilibrium, in which it rests until confronted by a new problem or disequilibrium."* (Dewey in O'Hear 1991 p9)

Dewey believed that people had to adapt to their environment as it changed, in order to survive:

"Growth is the exploitation of one's environment to the promotion of one's survival." (Dewey in O'Hear 1991 p14)

This does not sound very compatible with education for sustainable development. It sounds a much more egotistical approach in which the future needs of others are not considered, which is strange as Dewey was a forward thinker with little time for the past. He was of course writing in an age when environmental concerns were not an issue and was more interested in the problem solving aspect of the environment.

Dewey defined four key characteristics of the curriculum in his "children learn by doing" theory, including:

- in the outdoor environment children are active and interactive participants in their learning process;
- children should experience first hand real life materials and learn to use real tools;
- practitioners should observe children and use the information to provide a challenging curriculum that is within their ZPD and to scaffold their learning, as described by Bruner; to put them in situations where their competence is stretched;
- children need to be educated by competent educators in order to develop competencies.

The outdoor environment provides a context in which children can problem solve and develop dispositions and skills which focus on the processes of 'knowing that' which form the foundation for later more formalised learning. Dewey had much to say about the formal subject-based curriculum but his greatest influence on the early years curriculum has been in the areas of play-based learning and problem solving, as well as in the importance of learning being meaningful to the child.

4.15 The forest school approach as a developing initiative

As 'forest school' is not a place but an approach so it did not matter that at Richard Bonington School we did not have a forest on our doorstep. However, it was a huge bonus to have extensive school grounds. In terms of outdoor play we initially tended to use our nursery garden for the majority of the outdoor experiences and spent much less time in the wider school environment. This had partly come about because high security fencing had put a physical barrier between the nursery and the field making access difficult. Our nursery team had believed in the forest school

approach for many years but it took time to collect evidence, research, fundraise and put all the practicalities in place before we could begin. In the summer of 2006 our weekly forest school session was launched.

The forest school ethos is well established in Scandinavian countries where they had many years of experience of using the outdoor environment with young children. Regular access to the outdoors is seen as a key means through which to achieve the aim of the early years' curriculum which is to create a competent child. The Danish curriculum is based on six competences:

- the many sided personal developments of the child;
- social competences;
- language;
- body and power of locomotion;
- nature and natural phenomenon;
- cultural way of expressing ones self and worth.

These competencies can be seen to reflect the influence of Dewey and it is interesting to compare them with the areas of learning for the EYFS curriculum:

- personal, social and emotional development;
- communication, language and literacy;
- problem solving, reasoning and numeracy;
- knowledge and understanding of the world;
- physical development;
- creative development

These areas relate much more clearly to a traditional subject-based curriculum. It could be argued that by introducing a forest school approach we are imposing an approach from abroad onto our existing early years education system. I would argue that historically we have always taken influences from other parts of the world. People like McMillan were influenced by the work of Rousseau and Froebel (Garrick 2004). Our child centred curriculum was influenced by Dewey and our target led curriculum also has its roots in America. Piaget, Vygotsky and Bruner all based their research in other countries, so we have a long history of taking what we like from the experience of others and adapting it to our own needs. In our setting we have demonstrated that a forest school approach can fit within the existing framework for the early years curriculum and add value to the work that is

already being done. Garrick (2004) considers the introduction of this Scandinavian approach to this country and concludes:

> *"It seems that the distinctive practice of the Scandinavian forest schools has relevance for practitioners working in very different cultural contexts."*
> (Garrick 2004 p91)

In taking up the forest school approach in our setting, I was influenced by Frood (2007 p10) from the Bridgwater College and Forest school who said, about her own experiences of offering a forest school:

> *"Giving children and young people the opportunity to experience the outdoors in this way provides for their emotional independence and emotional well being and a knowledge and love of outdoors which hopefully will last their whole lifetime. It is so rewarding to see children blossom in this way. Ideally, all children should have the same opportunity."*

I particularly liked the remark about it being rewarding to see children blossom. Our experiences have led us to observe this happen time and time again and no words can create the satisfaction for a practitioner of seeing a child develop in so many ways within such a stress free, exciting and highly motivating environment. It far outweighs the days on which we return home cold and wet and exhausted! When New Economics Foundation and Forest Research undertook three case study research projects, (www.forestresearch.gov.uk) they found gains for children in confidence, social skills, language and communication, motivation and concentration, physical skills, knowledge and understanding and new perspectives. We made similar observations from our outdoor educational experiences. The NEFF research found a ripple effect went beyond the forest school as the children used their experiences in other parts of their home and school lives. I find these ripple effects most exciting because they demonstrate the value of the forest school experience, not just for the gains of being outside during the session, but for the impact on all areas of the child's development which affect every part of their learning. As practitioners, these findings are important for the way we look at and judge the effectiveness of our teaching. If more children followed a forest school approach within their regular learning experience we would reap the rewards in other areas (see Appendix 10). O'Brien and Murray (2007) commenting on the findings of the NEFF research, pointed out that many children have limited contact

with the outdoors and are therefore missing vital experiences of being comfortable in nature:

> *"Forest school is one of the ways in which this can be addressed. Forest School should be used on a wider basis as a vital part of children's outdoor learning experience, but that to achieve this Local Education Authority support is crucial for effective Forest School provision."* (O'Brien and Murray 2007 p8-9)

The findings of the New Economics Foundation and Forest Research are in line with the findings of Trout (2004) at the Forest School and Early Years Centre at Bridgewater College and with Charlton (2007).

4.16 Using the landscape as a metaphor for children learning

Jenkins (1972) used the landscape as a metaphor for analysing different approaches to curriculum design. He related it to the opposite ends of the landscape spectrum from formal gardens to wilderness. He pointed out the role played by humans in taming the landscape from a wilderness to a managed formality through intervention. This metaphor is linked to the curriculum in that the design of the curriculum is also tamed by human intervention:

> *"Landscapes are natural but they can be organised. The concept of intervention raises several issues.Growth towards what - princely gardens or the horrid graces of the wilderness."* (Jenkins 1972 p16)

The result of no human intervention in the garden would of course be for the garden to revert back to nature. One of my favourite natural spaces is a primrose wood on a friend's farm. For many years horses went through the wood creating a strong path structure; this made it easy for people to walk through the wood following the path. Then one day the riding school closed and the horses disappeared and within two years the paths were overgrown and it was a challenge to find a way through. As a society we have discovered that if we make our garden's too managed we limit wildlife by removing their natural habitat, therefore we need to have a balance of managed and wild areas. I wondered if this metaphor could be applied to the way children learn.

Practitioners are constantly under pressure to implement programmes so we take children away from their chosen activity and direct them to what we needs to be

done to fulfil our chosen objectives. However, what I learned from my observations was that children demonstrated all the time, through their own chosen play, how they learned:

- sometimes this was through the development of schemas;
- sometimes it was by engaging in a group game which evolved over time and demonstrated how children built on each others expertise;
- sometimes it was by stepping back and watching their peers in action.

My evidence indicated that just like the gardens our children need a balance which includes time to follow their own interests and learn in their own wild spaces without adult interference. It was interesting to observe that when adults had finished rolling out their planned, structured, modelled, focussed, narrowly objective tasks and children were freed into the learning environment, they tended not to continue to work in the same way they had been interacting with the practitioner. Instead they reverted to a rich selection of play activities which would be far too complex for adults to attempt to write up and plan every day. This does not mean that practitioners should do nothing but it means we should take more notice of what children are telling us about the way they learn. I expand on this in Chapter Six including reference to the EPPE project also referred to in Chapter Two.

4.17 Danish forest school experience

An example of allowing children to demonstrate how they learn best was found in the Danish forest school approach. My job share partner and I spent a week at a forest school in Holme Olstrup in South Zealand, Denmark in 2007. The setting consisted of a small building, a large forest garden and access to a beautiful wider forest. We were made most welcome by staff, children and parents. The forest school approach to learning has a long standing history in Denmark and in those places where forest schools operate, the local community is very supportive and proud of it. The kindergarten building had a homely atmosphere with an open kitchen having fixtures and fittings in natural materials where tea lights were used to give a relaxing atmosphere. (see Illustrations 4 and 5)

Illustration 4 The Danish nursery building

Illustration 5 Inside the Danish nursery building

In the kindergarten setting children attend from the age of three to six years. Full time formal education starts at the age of six or seven and it was beyond the comprehension of the pedagogues (early years practitioners) that we would put our children into full time education at the age of four. They could not understand why we would want to test a child at five and then have a virtual competition comparing them to another 'like child' in another part of the country in order to test the effectiveness of our setting. Our mass grouping of children into educational boxes went against all the pedagogues' principles of nurturing the individual.

Outside the children had access to two different outdoor spaces, the first being a large open forest garden attached to the kindergarten building which included a large tee pee, a fire pit, a tall swing, a bike riding area, tables and benches, trees to climb, assorted shelters, rope ladders and a small number of man made resources. (see Illustration 6 and 7)

Illustration 6 The forest garden – using the bikes

Illustration 7   The forest garden – climbing a tree trunk

The second area was in the main forest and included hills, a pond, trees to climb, big stones, mats to sit on and real tools. Children could access saws and knives to support their learning. They were encouraged to manage risk and practise life skills rather than being sheltered from coming into contact with risk.
(see Illustration 8 and 9)

Illustration 8   Attitude to risk – using saws

Illustration 9   Attitude to risk – using a knife

A UK report, "Risk and Childhood" published by the Royal Society for the Encouragement of Arts, Manufactures and Commerce (2008) concluded that parents are more worried about their children's safety than ever before. The report said the lack of balance between challenge and risk could affect the economy, by stifling the creativity and skills associated with entrepreneurialism. (www.rsariskcommission.org.uk) In the forest school children were free to roam within a wide area of the forest. (see Illustration 10 and 11)

Illustration 10 Using the wider forest – freedom to roam

They were outside by 9.30am and remained outside, whatever the weather, until they were collected. Parents could access the kindergarten anytime between 6am and 5pm. We observed how fit and well co-ordinated the children were and we were impressed with their excellent observational skills. Children worked well together, with younger children taking the lead from older children and older children acting as role models. Children in the forest school had two days off through illness for every two weeks in standard settings. A boy with a serious kidney problem had been sent to the forest school because of the reduced risk of infection.

Illustration 11 Using the wider forest – by the pond

The children who attended the forest school experienced nature and natural things in their true environment. Most of us end up bringing nature inside to try and compensate for a child's lack of first hand experiences. We learned such a lot from our experience in Denmark and it was a privilege to spend time with people who had such a good attitude towards early years education. They were clearly educating children for life and not just preparing them for the next stage in the educational programme. As practitioners we felt there were things that the forest school children missed out on. We missed observing the creative opportunities on offer to our children, not just the creative arts but the creativity of sharing good books and stories, having materials for role play, using musical instruments, listening to a diverse range of music and exploring different cultural celebrations. The Scandinavian forest school approach could be criticised for its lack of creativity and approaches such as Reggio Emilia would find more creative ways to introduce into the outdoor experience. Garrick (2004) gives an example of the Reggio Emilia approach to outdoor learning. In our setting we try to incorporate creativity into our outdoor education. Our only regret from our Danish experience was that we were unable to communicate directly with the children but it was a clear reminder that language is at the heart of all understanding and learning. We took the

positive things we learned from our visit and incorporated them into our practice here. Additional examples of the forest school approach research base are given in Appendix 10.

4.18 Summary

This chapter has linked to my third theme - *The development of the outdoor environment.* This has enabled me to gaining a greater understanding of the importance of giving children the opportunity to interact in the outdoor environment through outdoor education.

I have explored the history of the nursery garden, the forest school approach, nature deficit and the importance of giving children the opportunity to interact in the outdoor environment through outdoor education. I have expressed the importance of outdoor education in the early years curriculum in relation to UK and Danish approaches. I have expressed how these influences have supported the development of practice in my setting and more will be said in Chapter Six. Our education system as it stands at the moment is prescriptive and gives children limited control over what and how they learn. It does not set out to empower children as individuals. The National Curriculum, literacy hour and numeracy strategy with its test based ethos has taken control away from teachers. While the introduction of these strategies had some positive effects, the lack of flexibility and opportunity for individuality meant that teachers were less able to use all of their professional judgement. The demands of formal schooling have put pressure on early years settings to 'prepare' children for school in mechanistic ways. According to the Cambridge University Review of Primary Education, Interim Report (2007) standards in reading in primary schools has remained the same since the 1950's, despite £500m being spent on the literacy and numeracy strategies. Maths had improved since 1995 but the report stated the results between 1995 and 2000 were seriously misleading. www.primaryreview.org.uk Other international studies which will be discussed in Chapter Six show an equally depressing picture. Using the outdoor environment could offer the opportunities that children need if they are to develop their social skills and competencies giving a firm basis for the foundations of learning.

In this chapter, I have reviewed some of the historical and theoretical influences on the early years curriculum with a focus on the people and theories that have been important in shaping my thinking.

Chapter Five
Methodology

In this chapter I describe the methodology used in my research. My initial aim when starting the study was to improve practice. My focus was on the quality of education we provide for the children in our nursery setting through using the outdoor environment. I had three initial criteria for a methodology:

- it needed to incorporate making changes which would benefit the education of the children I taught;
- it needed to involve a collaborative approach as an early years setting is a partnership of children, practitioners and the wider community with each group having an impact on the setting and I wanted to ensure they were all part of the study;
- it needed to involve the collection of data based on observation as this is a well established method of assessment in early years settings and a method I have always found to be most effective.

Action research methodology matched all these criteria and the work of Mcniff, Lomax and Whitehead (1996) was particularly useful in developing my understanding of the action research. It is daunting to be faced with the challenge of finding 'new knowledge' because research has been around for so long; it is hard to believe that I could actually find something new! Therefore it was a relief to read the definition by Macintyre on the art of action research:

> *"Postgraduate research students are often puzzled by the requirement for "original work" for an M.Ed. or Ph.D. thesis and are nervous of choosing something that has been researched before. It is very difficult however to find a truly "original" topic, but the originality can come from the method, from the different focus which is implicit in the research question, from the context where the action happens, or from the action plan itself as well as from reporting the "original" responses of the group being studied."* (Macintyre 2000 p8)

I discuss the approach taken to action research in this study, consider the value of the research as case study and discuss validation issues in depth. I present the case for the action research process, demonstrating the uniqueness of this study combined with the value of its findings to the wider community.

This chapter links to my second theme - *The impact of national policy*.
I discuss how the research process led me to a better understanding of the power of being a teacher researcher and how the process helped myself and my team overcome some of the pressures involved in implementing national and local policy, which in turn enabled us to make positive decisions about the way we delivered the curriculum.

5.1 Finding a research approach – qualitative research

Having established the paradigm (see Chapter One) in which my theory of knowledge was set and identified it as interpretivist, I needed to establish an approach which would lend itself to the type of knowledge I was looking to produce and a qualitative rather than quantitative approach was most appropriate as I wanted to improve practice, which would involve actually doing something and making changes. I did not want my research to be a paper exercise carried out in isolation. I wanted it to be inclusive to all the people who had an interest in our setting and I came to the study with a strong feeling that a qualitative approach was going to be appropriate:

> *'a qualitative researcher doesn't seek to learn more about the topic itself, but about how people understand and make sense of the topic'*
> (Hughes 2001 p53)

I found this a reassuring statement as I had always appreciated the value of the outdoors in teaching young children, but I did not claim to have extensive knowledge of research in this area at the start of this study. I have since read widely and while I can claim to know considerably more than I did in the beginning, I found that much of what was written about outdoor education was not directly relevant to my interests. I had to search for diverse sources of literature and this was probably because I focussed on how children made sense of their environment rather than a focus on environmental education. My data took the shape of investigating the way children interacted with their surroundings, sometimes inside but mostly outside. Most of my observations were concerned with outdoor activities and the way practitioners used this environment to promote learning. Some observations came from the indoor setting because the boundaries between the two were blurred and often an activity inside affected play outside. My investigation took the form of finding the best way of using the outdoor environment to stimulate and motivate learning

which met the developmental needs of individuals and groups of children. Practitioners and children could manipulate and change the setting to promote learning across the curriculum, using an holistic approach that included a strong sense of self esteem and personal responsibility. The three main elements which came together were the child, the curriculum and the outdoor environment (see Fig 5.1).
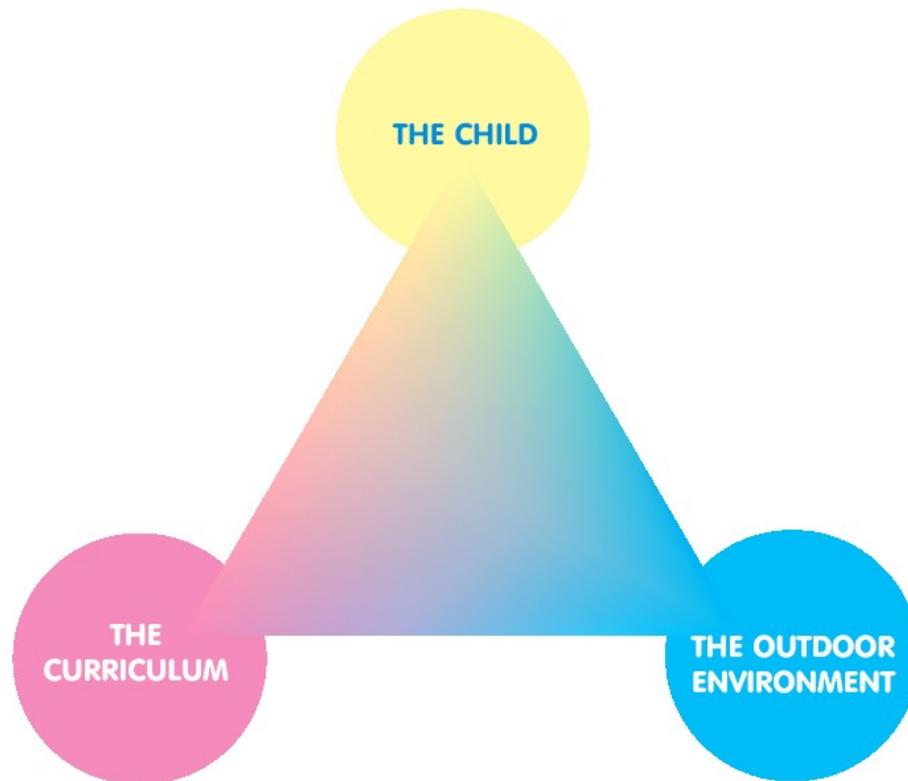
Fig 5.1 Three elements which came together to form this study

My research was specific to my situation, based on the observations of children in a particular geographical area and this raised the question of how relevant my findings would be to the wider community. Qualitative research could be criticized because methods lacked scientific rigour (Edwards 2001). Samples could be restricted and unrepresentative of the wider world with little control over independent variables. My research did not take a top down approach starting with a hypothesis (deductive research) but took a bottom up approach (inductive research) where data was collected first and then used to suggest a hypothesis:

> *"Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative*

researches study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them." (Denzin and Lincoln Eds 1994 p2)

Qualitative and quantitative researchers take different approaches; my brother, as a low temperature physicist, found my methodology very different to his understanding of research. However, he accepted that he was a quantitative researcher and I was a qualitative researcher and each of us would produce specific types of knowledge relevant to our area of study. He would strive to produce measured experiments that could be repeated and I would not be able to make any exact replications of my observations, even if I observed the same children engaged in the same activity:

"Qualitative researchers generally aim to show something's meaning or significance to particular people or groups of people." (Hughes in MacNaughton, Rolfe and Siraj-Blatchford 2001 p53)

Qualitative research is not easily made orderly and organised and in fact is more likely to be messy and chaotic. The difficult bit is to bring order to the chaos (see Illustration 3 in Chapter One). For qualitative research to be effective the researcher needs to be self critically aware. According to Edwards (2001) key issues for qualitative researchers to address include:

- reflection, for example, in analysing the data as an aid to making sense of a complex situation;
- validity and the way it is understood by different research paradigms.

I would also add power relations, in terms of being the researcher, to this list. I explore these issues later in this chapter.

Denzin and Lincoln (1994 p7-12) describe five overlapping phases of qualitative research which have developed over the past hundred years:

- *traditional* - from about 1900-1940 and generally based on positive views
- *modernist* - 1940's -1970's and still mostly positive but breaks from this beginning to emerge;
- *blurred genres* - 1980's when methodologies such as action research and case study began to be used. Research begins to make use of local knowledge;

- *a crisis of representation* - from the 1990's onwards when the researcher's voice became more prominent and reflective. The researcher need not be separate from the enquiry;
- *Looking forward, looking to emergent features* - attempting to tell the stories of the field.

The last two points included critical interpretation which places the subjectivity of the researcher, as a writer, at the centre of the research. I saw that my approach as an action researcher and as an insider researcher, using my voice to reflect on the data and to tell the story of outdoor learning in my setting matched this critical interpretation. Denzin and Lincoln went on to list some of the methods used to collect information for qualitative research including: personal experience, interview, observational, historical and interactional. These were considered ways of describing routine and problematic moments and meanings in the lives of individuals. I could identify with all of these as being useful tools to aid my research. I was therefore confident that my research needed to be qualitative:

> *"Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter in hand."* (Denzin and Lincoln 1994 p2)

Perhaps I already had a 'better fix' on the matter in hand because I was an insider researcher, I discuss this, and my subjective position in the research, later in this chapter.

5.2 Finding a methodology – action research

How I produced knowledge within a specific paradigm came down to finding a methodology and this involved what to investigate and how to investigate it. My chosen methodology was action research which is *'a powerful tool for change and improvement at the local level.'* (Cohen, Manion and Morrison 2000 p226)

A nursery setting is made up of a wide range of people, interests, constraints, requirements and opportunities. I wanted a methodology that would allow for the diversity of the setting and action research provided a flexible approach to investigating the complex interactions which took place. (see Fig 5.2).

I attempted to define my understanding of a methodology and like many questions in research, this was another of those questions where the answer

depended on who was asked. I had to find a definition I felt comfortable with for my study. Hitchcock and Hughes defined methodology as a theory of how research should operate in which:

"a broad yet complex array of ideas, concepts, frameworks and theories which surround the use of various methods or techniques employed to generate data on the social world" (Hitchcock and Hughes 1995 p20)

THE NURSERY SETTING
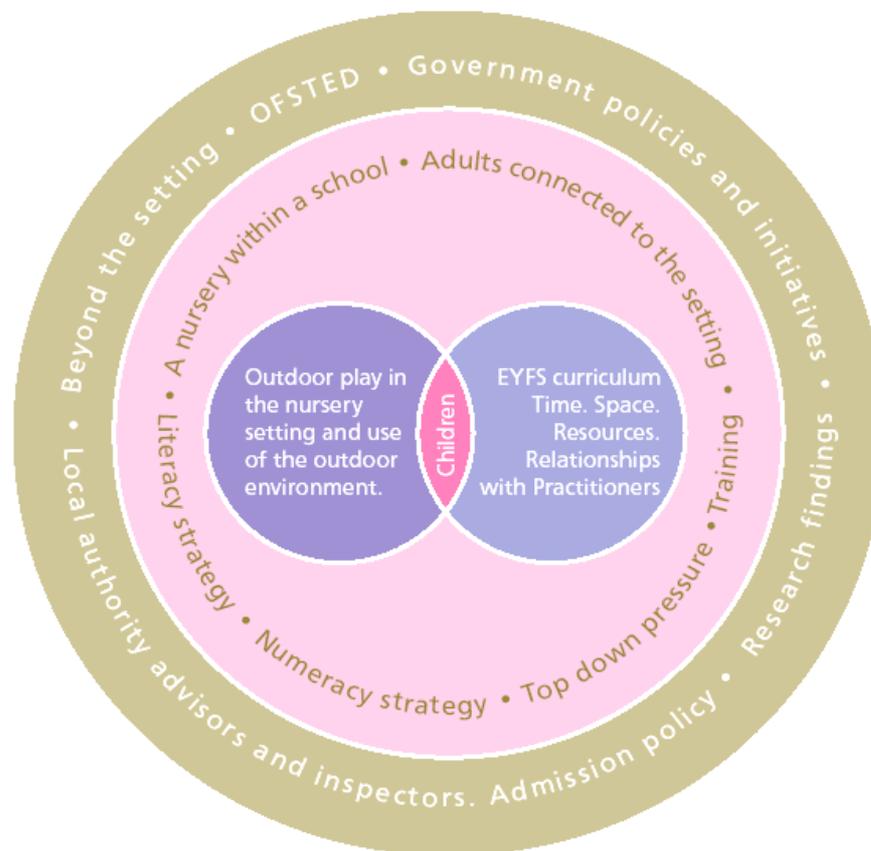
Fig 5.2 The nursery setting

A method is the technique employed to gather data within the framework of the methodology. The idea of taking some form of action in order to improve practice and in turn to improve the quality of education for our children, seemed appropriate to my needs. Action research was an approach which could be responsive to the holistic nature of using the outdoor environmental and of the early years curriculum and the early years setting:

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> *"The main benefits of action research are the improvement*
> *of practice, the improvement of the understanding of*
> *practice by its practitioners and the improvement of the*
> *situation in which the practice takes place".*
> (Zuber – Skerritt 1992 p15)

My research methodology (see Fig 5.3) was situational and collaborative and as it developed it also became clear that it was concerned with power relations and professional development. This was conducive with previous investigations carried out through action research (Cohen, Manion and Morrison 2000).

> *"The fundamental aim of action research is to improve practice rather*
> *than to produce knowledge. The production and utilization of knowledge is*
> *subordinate to, and conditioned by, this fundamental aim."*
> (Elliott 1991 p49)

Action research should be a tool for change and in this study the changes were aimed at children's interactions in the outdoor environment. My driving force was to develop good practice, therefore the paramount outcome for me was that the children would benefit. Any other positive outcomes, and there were many, were a bonus:

> *"It can be seen that action research is designed to bridge the gap*
> *between research and practice (Somekh, 1995 p340), thereby striving to*
> *overcome the perceived persistent failure of research to impact on, or*
> *improve practice."* (Cohen, Manion and Morrison 2000 p227)

The outcome of good practice should include improving children's learning. We have been given an objective based curriculum and we have to find a way of making positive changes within those constraints. The action research movement became prominent when a curriculum emerged that stressed the pre-specification of measurable learning outcomes. Stenhouse (1975) describes a central objective based curriculum as '*a kind of teacher proofing',* as the curriculum goes on in the same direction without consideration for the individual talents of the teacher or the student. Stenhouse argues that this is not the way to improve practice or knowledge:

> *"We do not teach people to jump higher by setting the bar higher, but by enabling them to criticize their present performance. It is process criteria which help the teacher to better his teaching."* (Stenhouse 1975 p83)

By 1991 Elliott was concerned that action research was being hijacked by an objective based curriculum:

> *"Teacher's are being encouraged to view action research as an enquiry into how to control pupil learning to produce predefined curriculum objectives or targets without any consideration of the ethical dimension of teaching and learning."* (Elliott 1991 p52)

In other words action research would be used to help teachers to achieve national pupil targets. Elliott argues this diminishes the role of action research in reflective practice. The action research process should give a practitioner the opportunity to inform professional judgement and therefore be able to take the right form of action when faced with a particular problem, and as a form of enquiry to face head on all the messy, complex realities of teaching and learning. Stenhouse argued that education comprised of four processes:

- *"training – skills linked to a specific task;*
- *instruction – acquisition of information;*
- *initiation – commitment to certain social norms and values (sometimes described as the hidden curriculum);*
- *induction – giving access to knowledge."* (Elliott 1991 p141)

Stenhouse's view on knowledge is that it is not the same as information, but constitutes structures or systems of thinking about ourselves and the world, which are culture bound and cannot be matched to the 'objectives model'. Induction involves teaching children to learn through discovery in order to address questions about our experiences of the natural and social environment. (Elliott 1998) This image of learning through discovery in a social context is in line with a social constructivist approach to learning as described in Chapter One where the adult engages in dialogue with the child to scaffold their learning. I see my study as a form of inductive research which takes a bottom up approach starting with the data and then forming a hypothesis; this matches a constructivist approach to learning. Elliott (1998) describes the link between Stenhouse and Bruner both see the role of the teacher as senior learner

alongside their students. An objective, target led curriculum makes it more difficult to engage in the induction approach to knowledge. Elliot (1999) gives three main reasons to reject the objective model:

- it distorts the nature of knowledge – in a post-modern culture knowledge is no longer stable and always open to revision;
- it does not take cultural experiences into account (what may be described as the hidden curriculum) but views learning as an individualistic possession;
- the standardisation of learning outcomes in the form of objectives reinforces the development of passive qualities in learners at the expense of other learning qualities such as self-determination. It is a model of social engineering for change, which ignores the experiences of individual teachers and schools and tries to define quality in terms of common standards rather than finding high achievements through the individuality of students. (Elliott 1998 p29-32)

He argues that:

> *"To translate structures into objectives or targets is to distort the nature of knowledge".* (Elliott 1991 p142)

The induction model involves a student thinking about a problem, questioning, sustaining creative thought, reflection and dialogue between the practitioner and the pupil. The practitioner is concerned with how children think, linking again to constructivism (see Chapter One), the training of pedagogues (see Chapter Three) and with Gardner's intelligences (see Chapter Four). Inducting students into structures of knowledge is about enabling children to think:

> *"The production of a uniformity of outcomes is an indication that students are not developing their own powers of understanding but merely reproducing the understanding of their teachers."* (Elliott 1991 p142)

Stenhouse wanted to make the point that knowledge gives us freedom and is something we should be using to stimulate our thought processes, it should inform our judgements:

> *"The most important characteristic of the knowledge mode is that one can think with it. This is in the nature of knowledge – as distinct from information – that it is a structure to sustain creative thought and provide*

frameworks for judgement. Education as induction into knowledge is successful to the extent that it makes the behavioural outcomes of the students unpredictable." (Stenhouse 1975 p82)

ACTION RESEARCH

Situational Nursery Setting.

Aim to improve practice.

Observe the situation.

Discuss in critical friendship group.

Decisions made about next steps.

Take some form of action.

COLLABORATIVE
All practitioners in the setting involved.

PARTICIPATORY
Insider researcher.

Sharing findings with others.

Research gets wider.

Evaluate the outcome.

Take new form of action. Cycle begins again.

More questions than answers.

VALIDATION
Critical incidents that show change or improvement.

Observations are not going to be the same if repeated.

Changing data into evidence triangulation

Contribute towards a theory of education that is accessible to others

Fig. 5.3 Tree of Action Research

5.3 My approach to action research

As Cohen and Manion (1985) state, action research was initiated in the United States in the 1940's with the foundations being laid as far back as the 1920's. It was later conceptualised by Lewin (1952), developed by Kolb (1984) and Carr and Kemmis (1986) to involve a spiral of cycles of action and research within a plan, act, observe and reflect cycle. Kemmis and McTaggart acknowledged others may have engaged in the action research process before Lewin but:

> *"It was Lewin's work and reputation that gave impetus to the action research movements in many different disciplines."* (Kemmis and McTaggart 2005 p560)

Zuber- Skerritt (1996b p85) in Cohen, Manion and Morrison (2000 p228) suggests action research is a form of:

> *"Critical and self critical collaborative enquiry by reflective practitioners being, accountable and making their results public*, *self-evaluating their practice and engaged in participatory problem solving and continuing professional development."*

This definition matched well with my perception of how I wanted my research to develop. Action research has evolved and changed with the passage of time and experience. Several generations of action researchers have engaged in studies which highlight a range of different approaches. In reviewing these different action research camps, I located my position as matching the Zuber-Skerritt definition. I also found the work of Kemmis and McTaggart (1988) useful, they define the principles of action research as:

- *improving education by changing it and learning from the change;*
- *participatory, people work towards improving their own practice;*
- *developed through self reflective spirals of planning, acting, observing and reflecting;*
- *collaborative;*
- *a systematic learning process;*

- *being inquisitive about circumstances, theorizing about own practices;*

- *gathering compelling evidence;*

- *being open minded about what constitutes evidence (or data);*

- *recording progress and reflections;*

- *making critical analyses of their situation;*

- *starts with a small collaborative group but the community widens as the project develops;*

- *allows change to be recorded;*

- *allows reasoned justification to others;*

- *established self-critical communities of people participating and collaborating in the research;*

- *starts small but by working through the changes it can lead to more general reforms of classroom, school or system wide policy and practice;*

- *starts with small cycles which help define issues and more power questions;*

- *making changes which affect others, therefore it is a political process.*

Most of these statements fitted well with my study but the three which particularly interested me were the last three points. My study ended up encompassing these statements but at the start of the research I had not considered them as something to aim for. Maybe this was naivety from a novice researcher but the two outcomes which both pleased and surprised me were:

- the outcomes which came from power related questions, such as, offering children choices;

- the outcomes which came from a small study developing into a much wider project, which happened despite the political constraints, because it proved to be good practice. For example the development from the small scale sensory garden into a forest school approach which had implications way beyond our setting.

From Kemmis and McTaggart's list, some would argue there was too much emphasis on the collaborative requirement in action research. (Cohen, Manion and Morrison 2000). It posed the question of whether action research could be done by an individual; for example if a teacher focussed solely on their own practice, would it be a true reflection of action research? This may seem a minor

point but it appeared to be the catalyst for a split in action research approaches. The collaborative requirement led to participatory action research taking a specific direction. According to Cohen, Manion and Morrison (2000) a split in approaches began over the issue of empowerment - whether empowerment was seen as a collective or as an individual force:

- One strand emphasised reflective practice in situations where for instance the teacher was the researcher (Stenhouse 1975; Elliott 1978). Kemmis (1997) suggested this reflective practice led to improvements in practice at a classroom level.
- The second strand advocated critical action (Carr and Kemmis 1986). The key feature was participation with the research being part of a broader agenda to change education or society. (Kemmis 1997)

I saw my approach to action research fitting in both camps, I was involved in *reflective practice* working from a classroom situation in order to improve practice. Elliott (1991) sees the reflective practitioner as demonstrating *professional competence* including the ability to act intelligently in novel and unique situations. In this situation *competence* means using *qualitative indicators,* decisions which require wise and intelligent responses. The critical nature of reflective practice requires the practitioners to respond to the students thinking in an appropriate way which may mean deviating from the given objectives and instead, taking an unanticipated direction.

> *"Action research integrates teaching and teacher development, curriculum development and evaluation, research and philosophical reflection, into a unified conception of a reflective educational practice."* (Elliott 1991 p54)

I was also involved in *critical action* research which had a broader impact beyond my setting. It was participatory, investigating a real situation, where changes were made and from which a new reality emerged. This was a collaborative process in which participants became aware of constraints and issues of social justice. I had to move through the reflective practice stage before I could enter the critical action stage where my research had wider implications.

5.4 Critical or emancipatory action research

Action research allows people to learn and create knowledge based on their own experiences and by using that experience, to observe and reflect. It is in a critical

sense developed from the German tradition, in particular the work of Habermas (1972). Cohen, Manion and Morrison (2000 p231) describe Habermas' classification of critical action research into a "three-fold typification" also supported by Carr and Kemmis (1986):

- technical, to bring about improvement in practice making it more effective;
- practical, to inform the practical decision making of practitioners, drawing on their informed judgements;
- emancipatory, the researcher has a better understanding of themselves as a practitioner, as a researcher and as the subject of the research. It is collaborative, critical and self critical. It has an educational and a political agenda, in particular, participants become conscious of the constraints on their freedom for autonomy and social justice.

Critical, emancipatory action research is described by Mac Naughton as fourth generation action research She described it as research which should embody educational transformation and emancipation by:

> *"working with others to change existing social practices and by using critical reflection and social criticism as key research processes. It is therefore collaborative, change-orientated and overtly political."*
> *(*Mac Naughton 2001 p210)

My own research seemed to begin as practical action research which promoted my professional teacher status and led me to informed judgements based on professional experience, but as the research developed it certainly led me to a better understanding of the constraints on practitioners which sometimes worked against the best interests of individual children. Therefore this study evolved into emancipatory action research. Carr and Kemmis said only emancipatory action research was true action research although Zuber-Skerritt argued that the first two were legitimate stages of development. My study fitted well into the third category so I feel confident I have engaged in emancipatory action research.

I feel the details of each action cycle of my research are best described within Chapter Six which outlines the detailed observations of the research (see Fig 6.3 and 6.4 and 6.6)

5.5 Participatory action research – being an insider researcher

The strong emphasis on collaboration in critical theories meant that this type of research was participatory and this fitted my research approach:

> *"Kemmis and Wilkinson (1998 p21) term participatory action research as aiming to help people to investigate reality in order to change it, and that it helps people change reality in order to investigate it. This is done by investigating what they do in reality, and then changing that reality to constitute new realities."* (Woolhouse 2005)

Woolhouse goes on to discuss Kemmis and Wilkinson (1998 p22) as saying:

> *"Participatory action research is best undertaken collaboratively by co-participants in the action research process, it is a collaborative social process of learning."*

I was aware that although my research was a team activity in terms of action, reflection and making changes, at the end of the day, I was the only person giving a voice to the others involved. I felt a strong sense of responsibility towards doing justice to their input in the way I wrote it up. Without their ideas, thoughts, actions, inspirations and wisdom, I would not have been able to achieve my aims. I am not trying to tell the story in an absolutely objective way as I am part of the research but I am attempting to share the details of my experiences with the reader. Having said this study is not absolutely objective, it is not subjective either as mentioned earlier in this chapter, my deep contextual knowledge gives an insight that is more than just subjectivity; the actions I have taken have been guided by my passion for outdoor education in the early years. I am telling the story of the development of outdoor education in my setting over the past ten years and as such this includes all the complicated interactions between the child, the practitioner, the curriculum and the opportunities outdoor education can offer.

> *"The subtlety of narrative lies in its capacity to convey ambiguity concerning cause and effect. In telling a story the author does not need to ascribe clearly causes and effects. Rather he may select from the record an array of information which invites the reader to speculate about causes and effects by providing him with a basis for alternative interpretations."*

(Stenhouse 1982 in McCormick p268)

The selections I have made from my collection of data are outlined in Chapter Six and through the descriptions of observations I have tried to show some of the causes and effects which came about through the action research cycles in this study (see Fig 6.1).

I was an insider researcher; I had worked in my setting for a number of years, so it could be argued that I had an advantage knowing the staff, children and parents very well. I had watched and been part of the development of the curriculum in recent years. Does being an insider researcher help me to get a better fix on the subject matter in hand? Knowing a huge amount of information about a setting could make the research process more complex. Could I be sure of seeing what was under my nose in such familiar surroundings? Could I take a critical approach to reflecting on a setting I had helped to shape over time? Katz (1984) argues that teacher researchers have a different perspective on certain theoretical issues than other researchers and have questions they would like to be addressed, which is why it is important for practitioners to engage in the research process:

> *"They also have a unique opportunity and responsibility for answering their own questions about how children play. In doing so, they will more effectively support the play and learning of the children in their groups and perhaps contribute to the growing body of knowledge about play."*
> (Katz (Ed) 1984 p2)

While appreciating the value of having insider knowledge, I also appreciated why others may view it as a problem. By being part of the research, was I objective enough? How did I know that my bias did not hinder the research process? If an outsider came into our setting, they may interpret things in a different way because they do not bring to the setting, the same knowledge of the children and they come with their own set of values and perspectives. Our experience of Ofsted highlighted this when one inspector gave a glowing report about the quality of education offered to our children and another inspector said it was satisfactory (see Appendix 17).The first inspector wrote at length about the

excellent learning opportunities in all areas of the curriculum, the positive social skills our children developed, the wide range of valuable experiences we were offering our children, our good home school relationships and so on. The second inspector barely touched on any of these issues and was only interested in the way we were preparing our children for the literacy strategy in school (see Fig 5.4). This demonstrates how people could come to the same situation and see very different outcomes depending on their pre-determined agenda.

Throughout the research process the researcher is faced with decisions and dilemmas relating to the research process which include data collection, reflections, analysis, and the dissemination of findings. Examples of dilemmas include:

- Observation - when data is based on observations, how can the researcher be sure their presence is not changing the interactions of those being observed? As a researcher we need the observation to go un-noticed by the participants in order to obtain a natural observation. Smilansky (1968) revived the use of naturalistic observational methods for observing fantasy and socio dramatic play. This type of observation has now become an established part of the early years assessment process. It is a huge responsibility to capture an observation when you know there is no possibility of repetition.
- Reflection – when reflection is used in action it may cause participants may find their existing theories or practices to be challenged. This was demonstrated by Bennett, Wood and Rogers (1997) when they used videotape to record teachers at work in the classroom.
- Power – the observer is in a position of power over the observed which could impact on the interactions of those being observed and could also impact on the way the observation is written up.
- Writing up – some issues of dilemma may not appear until the writing up stage. It is a big responsibility to write in a way that does justice to, and respects those who have taken part.

  "When one writes up the research one is often into yet another series of dilemmas" (Aubrey, David, Godfrey and Thompson 2000 p162)

- Teacher researcher – how does an ordinary practitioner make her voice heard?

I had to take all these dilemmas into account as I validated my research. Being an insider researcher also made me a participatory researcher. I was part of the research, facilitating the research and analysing the research. This gave me a degree of power over the research process which could affect my judgement and leave the other participants with less power over the development and the outcomes. Throughout this study there were times when I was in a position of power and times when I was powerless. As Cohen, Manion and Morrison (2000 p230) say:

> *"Participatory action research recognises a role for the researcher as facilitator, guide, formulator and summarizer of knowledge, and raiser of issues."*
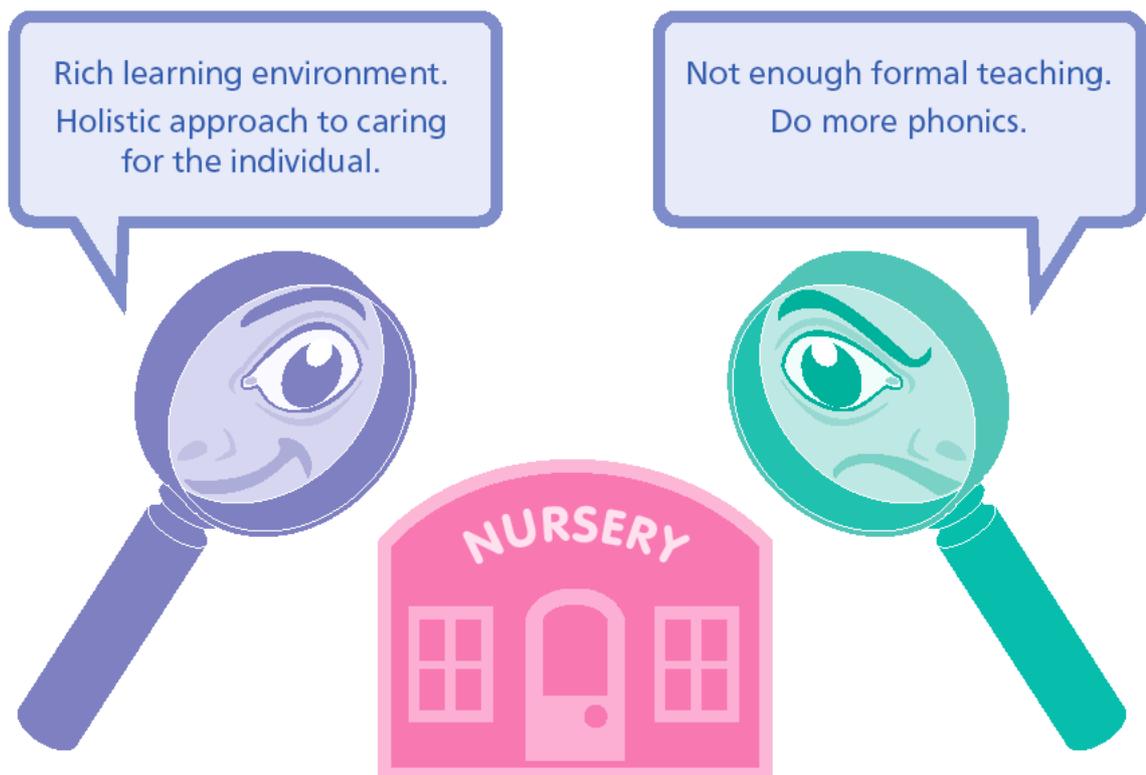
Fig 5.4 Inspectors observing a setting

Cohen, Manion and Morrison go on to say that action research is empowering and this comes from the collective rather than individual approach. Being part of a democratic process is also a key feature of critical theory. Teachers engaged in action research are involved in self monitoring the educational quality of their actions, taking control of the learning environment and of themselves rather than of their pupils. They produce professional self knowledge which creates a particular form of power, '*educative power*' (Elliott 1989). Power is often perceived as controlling and constraining but the educative power of action research is liberating and enabling. Through educational action research, teachers transform the learning environment into one which enables pupils to discover and develop their powers and capacities themselves. In this situation the power of action research for the teacher researcher has a cascading effect of also empowering the pupils. Empowerment can enable practitioners to make positive decisions about the way the curriculum is delivered.

My own research seemed to begin as practical action research which promoted my professional teacher status and led me to informed judgements based on professional experience, but as the research developed it certainly led me to a better understanding of the constraints on practitioners which sometimes seemed to work against the best interests of individual children and evolved into emancipatory action research.

5.6 Giving a voice to the research

My voice was being used to portray what I perceived to be happening in my setting. I felt confident in my practice because I had years of experience and I had also kept up to date with theory and practice, responding to new information and developing my practice appropriately. I also worked with people whose expertise I valued and trusted. Putting these statements together I felt confident in stating my claims but I could not be sure that another practitioner in the same situation would have come up with the same conclusions or have the same interests. These factors must inevitably impact on the way I portrayed my voice and how I gave a voice to others in this setting. I realized that my voice came through picture images. When I asked a question or gave an example of an observation, I visualized the situation and then reported on it. If I were not an insider researcher it would be very difficult to build up such detailed and instantly recallable images of the many interactions that took place in this setting. I saw

what was happening in pictures and not words. I then had to add the words so that the images made sense to others. My data collection included many photographs of children at play and these pictures helped to give the children a voice as well by producing an image of what they were doing.

5.7 Requirements for action research

Despite the process of action research being described in different ways, it is generally agreed that action research involves cycles or spirals of action consisting of plan, act, observe and reflect which may then lead into a new cycle (see Fig 6.3):

> *"To do action research is to plan, act, observe and reflect more carefully, more systematically, and more rigorously than one usually does in everyday life." (*Cohen, Manion and Morrison 2000 p227)

Action research allows changes in practice to take place which also link the process closely with professional development. This enabled all the practitioners in my setting not only to be part of the research but to extend professional knowledge and be part of a critical friendship group. Winter (1989) discussed the way Elliott (1982) emphasized how action research provided a necessary link between self-evaluation and professional development and this raises two important issues:

- the process of reflection connected to evaluation;
- the role of change in practice, linked with professional development.

The reflection process is crucial to action research because the reflection leads to the next cycle of change, forming a spiral of action, reflection and further action based on the reflection (see Fig 5.5) Practical reflection is often referred to as 'reflective practice' a term defined by Donald Schon (1983). This kind of reflection means choosing a course of action in a particular set of circumstances to realize one's values within an ethical framework (Elliott 1991). Because of the ethical nature, it implies an interpretation of values and includes reflections about means and about ends.
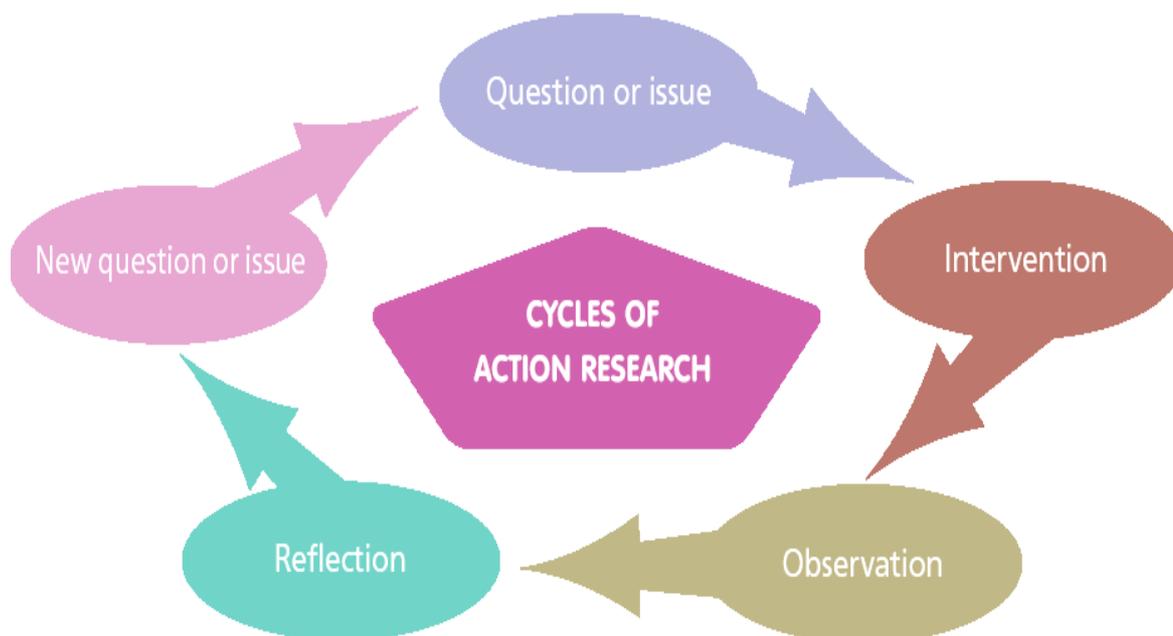
Fig 5.5 Cycles of action research

Carr and Kemmis (1986) identify three minimal requirements for a piece of research to be classed as action research:

  5.7a. *to have social practice at the heart of the study and be open to taking action with a view to improvement;*

  5.7b. *to proceed systematically and self critically through the action research cycles;*

  5.7c. *to be based on principles of collaboration.*

I believe my research meets all these requirements. I now look at each of them in turn.

5.7a To have social practice at the heart of the study
and be open to taking action with a view to improvement

Bassey (1995) in McNiff, Lomax and Whitehead (1996) describes action researchers as intent on describing, interpreting and explaining events while they seek to change them for the better. I could have been motivated enough to initiate a research study that was not aiming to improve a situation. This was clearly a motivating factor for my involvement in any study and had implications on my choice of methodology:

> *"In action research there is an emphasis on your deliberate intention to intervene in your own practice to bring about improvement. This concern needs to be stated in a special way. Action research questions should be of the type: "How can I improve…..?, because action research should be about your action, not the action of others."* (McNiff, Lomax and Whitehead 1996 p17)

While this summed up my research intentions I failed to see how I could take action in the setting without it involving the action of others and this made me a participatory action researcher. One of the significant features of action research as opposed to other methodologies is that action research involves doing something about the area of study. This allowed the opportunity for change to take place. An example of this was when the children used a set of wooden planks and fish boxes for building structures in outdoor play. When practitioners brought these outdoor boxes and planks inside the nursery, they observed the children's pattern of play over a week. They found a similar pattern of play emerged in the morning session and in the afternoon session. Having reflected on the outcome practitioners then put the activity back outside and observed the children's response. The following term we repeated the exercise knowing that some of the initial group of children had now moved on to school meaning different children would have to take the lead and we observed how new leaders emerged to perpetuate the previous pattern of play (see Appendix 15):

> *"A distinguishing feature of action research is that those affected by planned changes have the primary responsibility for deciding on courses of action which seems likely to lead to improvement, and for evaluating the results of strategies tried out in practice."* (Kemmis 1982 in Winter 1989 p10)

Education never stands still, it is constantly changing and evolving. As practitioners, we need to be open to change which has a positive impact on practice. In recent years the pace of change had some negative effects on the teaching profession. Teachers have been straight jacketed into a curriculum that dictates what, when and how to teach, having change imposed upon them. This has had a detrimental effect by making teachers wary of change. A climate has been created that is dependent on league tables and test results and which reflects a top down approach to the curriculum. Based on a sound understanding

of child development and good practice, most early years practitioners would value a bottom up approach to the curriculum. Instead they have found themselves faced with a top down approach which has made it difficult to implement change in self directed and self-empowered ways. (see Fig 5.6)

Even schools that were most determined not to give into pressure have had to teach to the test as the pressure increased. An example of this from my own experience is of the primary school my own children attended. It was determined to keep a balanced curriculum yet in year six my son did hardly foundation subjects until the SATs tests were over. His day revolved around language and literature, maths and science. After a few weeks he went from being a child who always had things to say about his school day, to a child who had nothing to say because every day was the same. Despite the schools relentless push to achieve good SATs results it was put in special measures by Ofsted, a decision which the parents vigorously disputed and which cost an excellent head teacher his job. A few weeks later the school achieved some of the best test results in the city but by then the report was final and a good school was thrown into turmoil.
The whole education system now revolves around tests results, leaving non tested subjects squeezed out to the edges of the curriculum, diminishing their status.

WHICH APPROACH HAS THE FIRM FOUNDATION: THE TOP DOWN OR THE BOTTOM UP APPROACH?
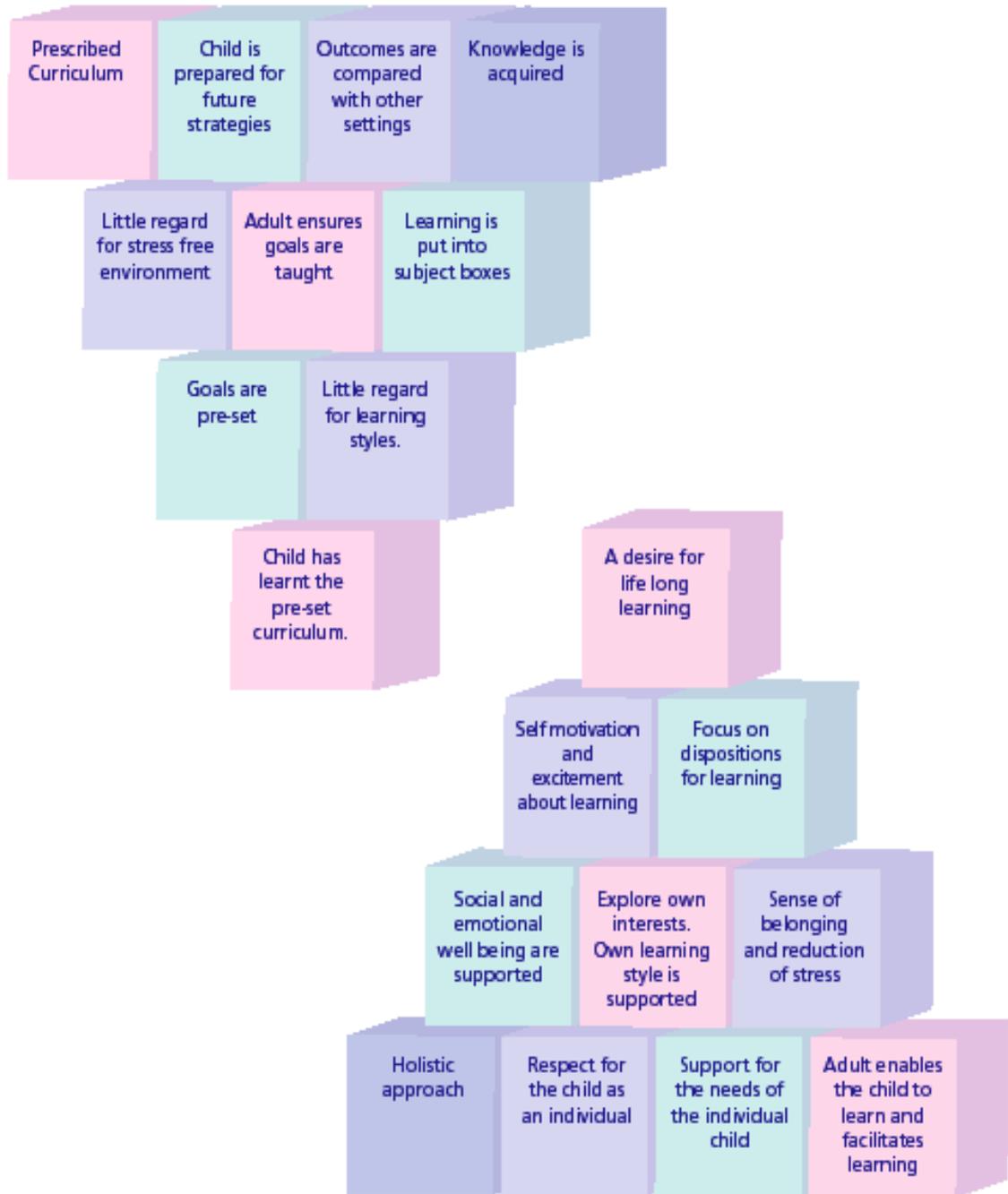
Fig 5.6 Top down or bottom up approach

Valuing each child as an individual seems to have been forgotten in all the pressure to achieve whole school results. This made child centred research seem all the more important so that in future, changes could be introduced in the knowledge that children would benefit.

The concept of change is a major part of taking action and became important because it had a strong impact on the type of methodology suited to my study. It led to a number of questions such as:

- what changes have taken place?

- who is affected by these changes?

- why make changes?

- is change always a positive thing?

These were difficult questions to answer as changes have a different impact at different levels, on the child, the organization of a setting, the teacher's own practice and the whole school. I give examples of each of these changes in action:

Change affecting an individual child or a group of children:
Kyle and James were drawn to play together every day in the imaginative play area set up as an animal hospital but their play was excluding other children from the area. When other children did attempt to join in, Kyle ended up hitting out. However, when Kyle was allowed to play in the area without James, or James without Kyle, the trouble ended. To resolve the situation their time together in this area was limited and some of the time included a practitioner working with them to talk through areas of conflict and model positive behaviour. This change was aimed at an individual child but it had an impact on others in the setting.

Change affecting the organization of a setting:
The introduction of extended periods of outdoor play impacted on the indoor activities as well as the outdoor activities and on the way staff managed their time during a session.

Change affecting a teacher's own practice:
Following an Ofsted inspection the practitioners in our setting became increasingly aware of the pressure to prepare children for future strategies at the

expense of child centred learning. This was a change we did not want to make, as we strongly believed in a bottom up approach to the curriculum rather than a top down approach. Despite the FS guidance advocating a play based curriculum (GB/QCA 2000) in my experience Ofsted could not be relied upon to inspect to this curriculum, therefore settings had to teach to Ofsted.

Change affecting the whole school:

If a policy is introduced stating that teaching staff should spend no more than two years teaching any one year group it could be considered positive change in encouraging teachers to constantly look at different ways of planning, teaching and resourcing their work. It could also be seen as negative because teachers no longer have the opportunity to specialise and to build up resources and expertise. There is inevitably a loss of choice in professional development because the option to stay within an age range is removed from the teacher's control.

Action research is concerned with issues of knowledge and change:

> *"it offers a powerful tool for improving our understandings about how to produce change in early childhood settings. It combines theory and practice in ways that can challenge our existing theories and shows us ways in which we can rethink practice."* (Mac Naughton 2001 p223)

I was looking for new knowledge of how children interacted with their environment so that I could instigate change to improve the quality of education for our children. For example, after discovering how much interactive play happened when children used the wheeled toys, our setting decided to put money into increasing the number of bikes (see Fig 6.6). However, before we were able to make informed judgements about this information we needed to have knowledge about child development and about what we wanted the children to gain from using the wheeled toys. We also had our own values to bring to the decision; we valued giving opportunities for collaborative play to develop and we valued the enthusiasm of the children for using wheeled toys as well as the physical opportunities they offered. As a team we brought our own personal knowledge of the children to our decisions:

> *"Do you start by implementing a change? Or do you start by analysing current practice in order to formulate a desirable change? Elliott's (1982) emphasis on "self evaluation" tends to suggest the latter, but Brown et al*

(1982) seemed quite precise in their recommendation that it should be the former." (Winter 1989 p13)

I found the two approaches to be inseparable. My initial interest began because the introduction of a sensory garden led me to review practice so the change happened first. This was the first cycle of action research at the start of this study. It matched Brown's interpretation but in other areas such as looking at the use of wheeled toys, change was implemented as a result of analysing current practice which matched Elliott's interpretation. This was my second cycle of action research. Good action research needed to be flexible enough to include both. (see Fig 5.7)

Observation

Observe children on wheeled toys.

Reflection

Our research shows we are meeting our children's needs and therefore our children are enjoying and achieving in a safe environment = Every Child Matters.

Relates to an issue

Concern that children rush for the bikes. Do we buy more bikes?

CYCLES OF ACTION RESEARCH

New issue or action

Local authority course on outdoor play does not advocate wheeled toys as a priority.

Reflection

Children have more opportunity to develop co-operative play, especially boys.

Action is taken

Buy new bikes based on observation. Sharing co-operative play.

Fig 5.7 An example of action research taken from this study

The role of change in the setting could have minor or major impacts on the child, the practitioner, the setting or the wider school. These implications could be positive or negative for the individuals involved. My research methodology had to be flexible and robust enough to cope with all these different elements.

5.7b To proceed systematically and self critically through the action research cycles

Looking back at the research process I went through, I can now identify a systematic development through the cycles of action but at the time I was engaged in them, despite my good intentions, the systematic process appeared to fall apart. I soon began to follow different themes and ideas which went into the mix, like ingredients for a cake and all got stirred up together for a long time before I could make any sense of what I was observing. Once I began to piece together the changes and the outcomes, I could see a developmental journey emerge. This formed the basis for my action research cycles. By working within a framework of cycles to organise the work, the cycles of action and reflection could continue indefinitely which Griffiths (1990 p43) referred to as the messy real world. How this *self - reflective spiral of planning, acting, observing, reflecting, planning etc.'* worked out in the reality of my research can be seen in (see Figs 5.8a, 5.8b, 5.8c) the following cycles based on models of action research by Elliott (1982) and Kemmis (1982) (in Winter 1989 p12)
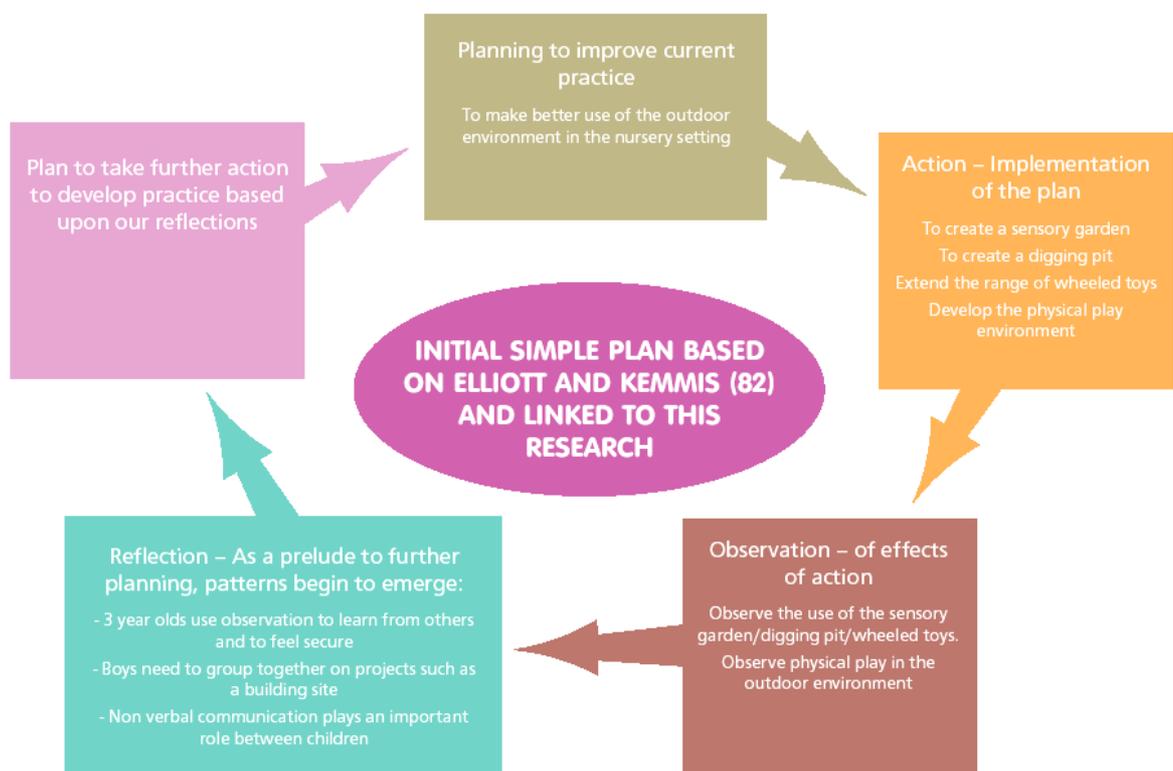
Fig 5.8a Initial plan of action research
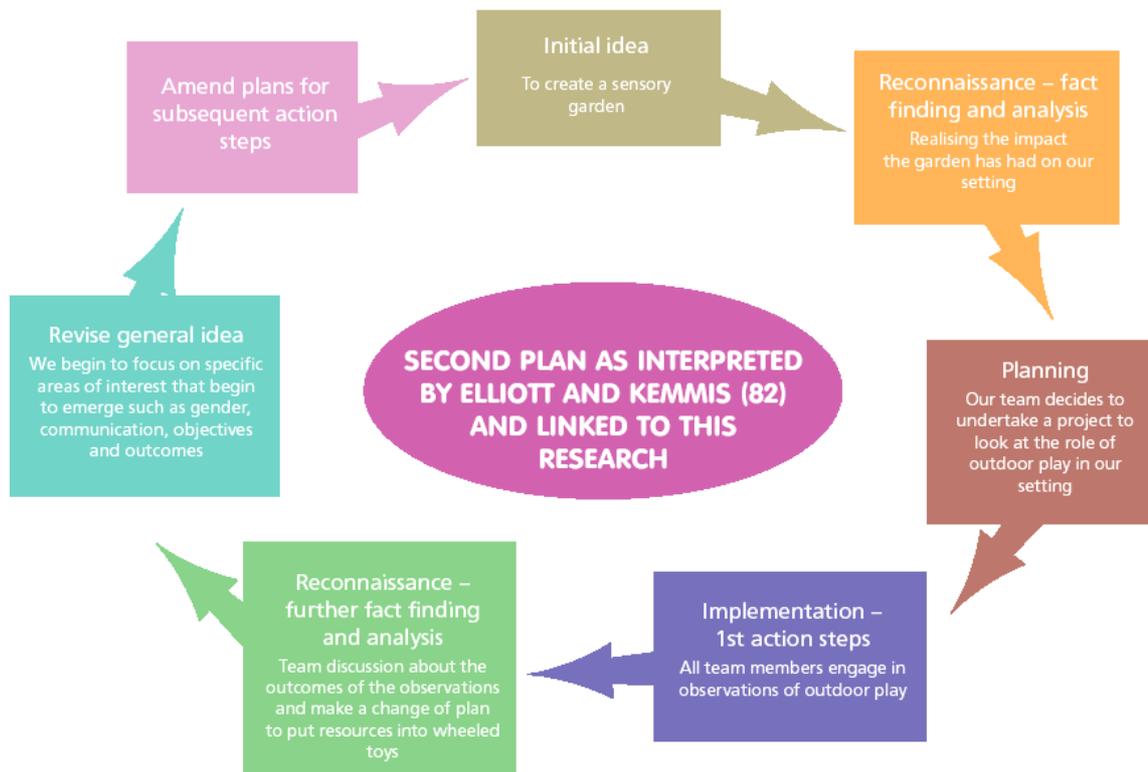
Fig 5.8b Second plan of action research
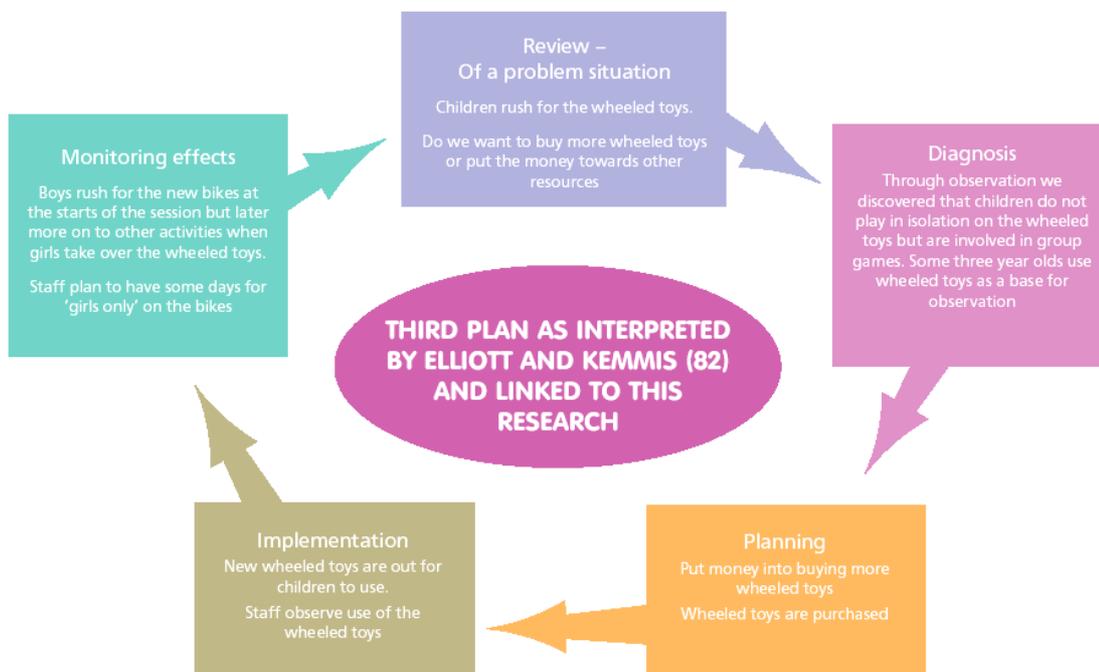
Fig 5.8c Third plan of action research

By looking at my research from a self critical point of view I began to formulate a theory from my practice, grounded in the research:

> *"Through action research the ideas of theorists are problematised. Such a process may not offer teachers with battered souls much therapy but it does offer even battered souls the prospect of enhancing the quality of their students' learning experiences."* (Elliott 1994 p137)

Somekh (2003) in commenting on Elliott's view stated that:

> *"all practitioners, across professions and sectors, problematise their own and other people's theories as an integral part of their day to day experience. Other people's theories become personally owned, as we engage with them experientially, once action research becomes a way of life."* (Somekh 2003 p260)

I like this view of action research becoming a way of life as that is exactly how the study has felt to me. In our setting we had regularly engaged in mini projects which could be seen as action research. They happened because it was a way of operating to improve practice without the need to write it all out in a theoretical form; they just happened! For Elliott theory and practice were not divided:

> *"the underpinning concept of the teacher as researcher is that theory generated by teachers is an integral part of teaching, rather than an add-on dependent on separate research activities."* (Somekh 2003 p256)

Somekh (2003) was heavily influenced by Elliott in her belief that learning could be best understood by classroom based research where teachers contributed as equals bringing specialist knowledge that was not available to outsiders. Therefore a balance of both inside and outside knowledge gave rise to good research. Elliott's work was groundbreaking in that he had to justify claims that teacher's could develop theory and changes in practice resulted from self-monitoring, which demonstrated theorising even when teachers were unable to articulate their thoughts. Elliott believed theory was an essential part of a teacher's professional practice and that this professionalism was eroded when politicians attacked a teacher's professional knowledge:

> *"The price of teachers' emancipation from the influence of theorists is their deprofessionalisation into operatives of a state-designed technology which is shaped as a national curriculum and assessment system."* (Elliott 1993 pp23-24)

Elliott identifies the tension between teachers as knowledge producers and as guardians of educational theory. Elliott did not divide theory and practice but saw theory as providing a conceptual framework for teachers to expand on their experiences. Elliott looked to Carr (1986) who said theory related to practice by enlightening practitioners.

I found that changes in my own practice evolved as a result of the research process, which enabled a theory to develop. Theories came by observing and analysing the outcomes of the changes that had taken place. For example, I found that observation was a crucial activity for young children's learning. This observation process seemed particularly important to three year olds. They observed the play of slightly older children and then used this as a model for their own play. These observations gave the opportunity for critical reflection of my practice.

5.7c To be based on principles of collaboration

A nursery unit attached to a school is a complex environment to study. It functions as a team effort and it is impossible to work alone. A collaborative approach was therefore essential and maximised the opportunities for all members of the team to be valued. This facilitated the development of a critical community. As a qualitative approach, which was situational, action research allowed for improvement in practice and the development of a deeper knowledge of the complex interactions which were characteristic of the early years setting. This complexity of context was affected by the number of different people involved and the changes they brought to the setting:

- children move on to school throughout the year and other children take their place;
- parents move on as children transfer to school;
- different practitioners work in the nursery at different times; special needs support staff move on with some children;
- students train in the nursery, working for short or long placements;

- a wider school community is involved at different times.

The way a nursery functions is affected by external pressures and policies. Throughout the period of the study, the statutory framework in which we work has changed considerably (see Chapters One and Two) culminating in the EYFS (GB/DfES 2007) in place by September 2008. This complex web of people, curriculum and environment made it difficult to find a balance between keeping my research to a manageable size, yet still acknowledging that it had to respond to a wide range of interlinked issues.

As part of the collaborative approach, the understanding of practice by myself and the other practitioners, seemed crucial if a deeper level of understanding about what was happening in the outdoor environment was to be reached. This was an effective approach because it allowed everyone working in the nursery to take ownership of the project and to contribute towards it. This process was very similar to the process of developing good practice in outdoor environmental education. For example, I observed that when participants took part in an environmental activity, they began to take ownership of that project as it developed and so took on a personal responsibility towards it. The effectiveness of this methodology was endorsed when a practitioner working in the setting chose to look at outdoor play as part of on advanced diploma course. She chose this area to research for her dissertation because of the work she has been involved in as part of my research. It seemed strange to see some of my aims become the basis of another person's research. This clearly demonstrated that being part of an action research process gave the participants the opportunity to take ownership of the study and confirmed that the collaborative nature of this work had been a success. Action research has been an effective way of researching the actions of young children and it allowed me to begin to analyse the complex interactions taking place during outdoor play. It was flexible enough to allow for changes in the setting and changes in the early years curriculum, which had been considerable since the research began. Collaboration was therefore essential if this study was to be valid as a piece of action research. The quality of the outcomes would not have been as rich if I had not had the privilege of working with such a professional, motivated, critically thinking team of people.

5.8 Identifying a method for data collection within the action research cycles

Observation has been the key method for collecting data in this research as it provides the information needed and is already an established method of assessing a child's progress and the effectiveness of an early years curriculum. As stated in the previous section, an early years setting is such a complex environment to study that I needed a method which gave me a window into how children were using the environment. I wanted to see exactly what was happening at any given time in terms of interactions between the children, the adults and the activities available. Direct observation is not the same thing as looking at or keeping an eye on things but is a skilled activity that improves with practice. By using direct observation, I made notes on what I saw the children doing and then expanded on the notes afterwards. The expansion usually followed a discussion about the observation with other practitioners in my setting. I began to learn the skills of observation when I trained as a nursery nurse in the late 1970's. At that time we spent every other week in placement and we were expected to bring five observations back to college after each placement week. This seemed such a chore at the time but on reflection it gave me a very good grounding in how to observe children. I have been able to continue to practice the art of observation throughout my teaching career because observation lies at the heart of assessment in the early years.

This research began through an observation of how a group of nursery children were using a sensory garden. I realised the interactions of the children were providing a wealth of information about how they used their environment and I wanted to find out more. Observation provides the opportunity to look at an incident from another person's point of view, to give another person a voice and is one way to get inside another person's experiences.

I discovered that researching early years was like a treasure hunt and the observations were the clues where each observation led to another clue. We looked with eager anticipation to see if we had reached the treasure but what we actually got was another clue! The treasure, I thought, was something to do with knowledge and an idealistic urge to use that knowledge to improve practice, but I was not sure if we would ever get to the treasure and if we did, would we recognise it? It was probably more realistic to hope that the process of the research journey would, along the way, deepen our insight, increase our knowledge and allow us to develop as a community.

Observation was a powerful tool and could be used in many different ways to fulfil different needs for adults and for children. As observation was a major part

of my study it is worth discussing some of the issues relating to it in more depth (see Fig 5.9)
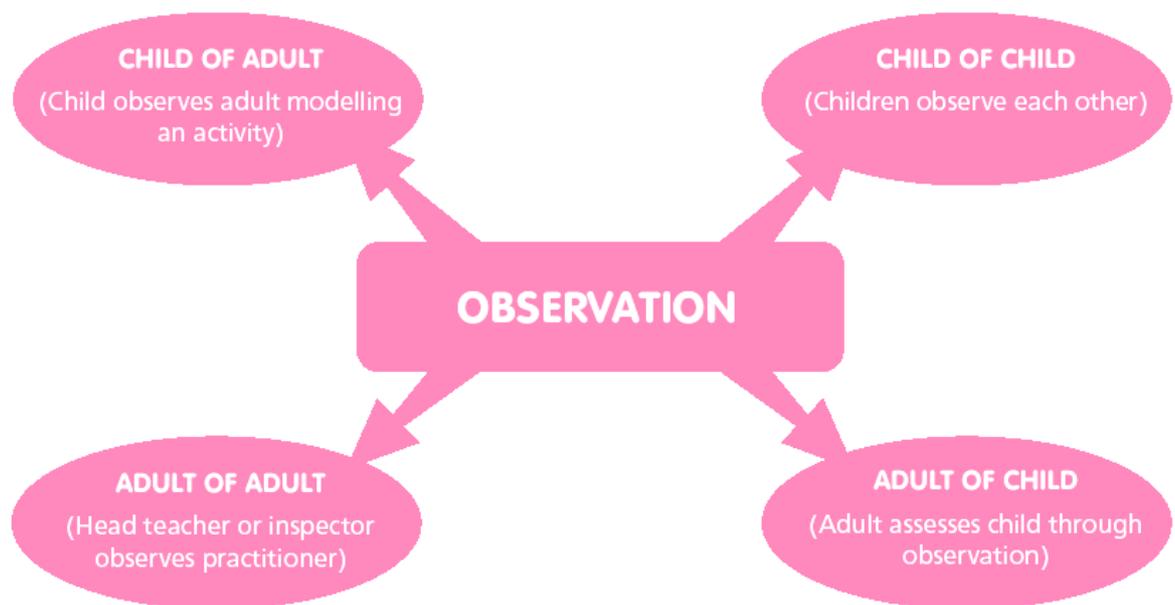
Fig 5.9 Who observes who?

- observation is used by all EYFS settings for assessment;

- observation forms the main part of my research data;

- observation of role models helps children to learn social behaviour as part of the social learning position;

- observation was used as a learning tool by children throughout my research; this mainly involved children observing each other and copying movements and activities;

- observation forms part of the conforming to culture/society approach in terms of assessing a child's stage of development and learning when observations are measured against pre-specified learning outcomes;

- observations are set against pre-determined measures of performance in the EYFS curriculum in the form of early learning goals;

- observations are used by senior members of staff to judge the performance of teachers which may be used to influence performance related pay.

We used a number of different ways to gather this information in our setting, using post-it notes with snapshots of information written at the time, detailed observations of a child or group of children, time sampling to plot where a child was and what they were doing for a given amount of time and photographic evidence to document a child's learning. These were accompanied by discussions between practitioners about what they had observed children doing which is a particularly powerful method of using observation to support a child and move them on to the next stage in their learning. Observations were matched to the goals or stepping stones on the profile for each child by highlighting achieved targets (see Appendix 4). New targets were then set for the child based on the observations and the cycle began again.

5.9 The 'pro's and 'con's of using observation

Having established that in our setting we used observation in much the same way as described by Mac Naughton (2000) for assessment of the conforming to culture/society position on the curriculum, described in Chapter Two, there were many aspects of using observations to match pre-set goals which made me feel uncomfortable. My instinct told me it was not necessarily in the best interests of the children to have such a rigid prescriptive approach to early years' education. Mac Naughton (2000) discusses the ways in which observation can reinforce bias with educators seeing what they were looking for, and this raises the question of whether it is possible to observe children objectively? Having used observation as the basis for my data collection for this research study, I appreciate how difficult it is to observe children. I understand you cannot include everything and that selective judgements are made. I know different people can interpret the same situation in different ways, so it should have been no surprise to me to face these issues, but it still made me feel uncomfortable. Therefore I had to ask the question, could I really justify my research through observation? How much of my own values and beliefs were reflected in my observations of the children in my setting?

Mac Naughton (2000) goes on to say that traditional approaches to observation and assessment could only tell us about the small observable events in a child's life and could hide key issues. This all sounded a bit negative from my point of view as I had found observations to offer a great insight into how children interacted with their environment. However Tamaki found that research in Japan showed:

> *"educators need to observe children over time, looking at factors internal and external to the child."* (Tamaki in Mac Naughton 2000 p150)

Some of my most interesting observations were based on observing children over a period of time. The technical approach to the curriculum advocated observing children measured against standardised tests and looking for evidence that a child was conforming to standardised patterns of development. My observations tried to focus on what children were doing, and how they were doing it. I did not have a list of objectives lined up ready to tick when doing my research. This made me more confident about the appropriateness of my use of observation which had developed over many years. I felt it was a powerful tool and I was satisfied that by using observation I had been able to gain a window into some of the ways children were learning, which enabled me to develop good practice. The use of observation to find out about a child's learning and development was not new. When Margaret and Rachel McMillan opened their first open air nursery in London in 1914 they saw it necessary for teachers and assistants to observe individual children. These observations were built up to form an individual child profile which addressed a list of pre-specified objectives - this all sounded very familiar.

In conclusion, children are dynamic living things therefore what is observed will never be cut and dried and easily finished. I will still find new things to write about after this research is finished! The observation process allowed me to collect the data I needed to make sense of the situation and to form hypotheses which supported theory.

5.10 The complex nature of reflection and action

Having collected data by observing children in the setting, our team of practitioners reflected on it and made appropriate changes. We then reflected on the outcomes of those changes (see Fig 5.7). Following our reflections we were left with several options:

- *revert back to the original way of doing things;*

- *conclude that the changes should remain;*

- *the outcome might lead into another change, so the cycle of action observation and reflection would begin again.* (see Fig 6.4 for an example)

For me, action research has become a process of evolution rather than a set of tidy cycles. In reality teaching and learning did not emerge in any neat order and there was a range of influences that led towards any outcomes which included the individual nature of each child, the skill and knowledge of the practitioner, what was planned and achieved, the resources available, parental support and many more. Action research involves cycles of action and reflection which used observation as a tool within the process. In the nursery setting there had traditionally been a process of planning, teaching and observing. Observations were discussed by the team and acted upon in a way which was a parallel and similar process to action research. Therefore in my setting, events were observed and acted upon, not necessarily because of my research intervention, but because of the early years culture.

5.11 Validation - giving research credibility

Establishing and making a claim for validity in this research has been complex as it has involved so many variables which were not measurable. My validation took the form of triangulation (Denzin and Lincoln 1998 p4) which enabled me to look at things from a number of different angles, like taking a photograph of an object from different positions to get an all round view of it. Validation is a difficult issue to address in action research because of the qualitative nature of the process. Quantitative research looks to find facts and figures and truths that are universal. Qualitative research seeks a more complex representation of the social world:

> *"In qualitative research the validity of the findings of a study does not, therefore, add to an argument for the probable generalisability of those findings to other settings. Instead, a statement about the validity of a study is a judgement about the extent to which it can be said that the research has captured important features of the field and has analysed them with integrity."* (Edwards 2001 p124)

However, I wanted my research to be relevant beyond my setting and although I hoped I had analysed my data with integrity and captured important features, I

also believed there were transferable issues in my findings. I wanted to produce illuminating research as well a critical interpretation. Action research could be criticised because samples are restricted and unrepresentative of the wider world with little control over independent variables. My observations were mainly restricted to the environment in which I carried out my research so how could I justify shaping educational theory and practice beyond my setting? Cohen and Manion (1985) suggest that triangulation happens when two or more methods are used to collect data and go on to say that many researchers subscribe in principle but only a minority used it in practice. This made me review my own data collection to see if I really had subscribed to using triangulation in practice. Following my review, I could state with certainty that I subscribed to triangulation as a good principle for validation but what about in practice? On reflection my approach was not clear cut. Most of my data was in the form of observations, but the way I used them was to view them from different angles through discussion with other practitioners, through photographic evidence, by analysing my notes (see Appendix 15). I felt this gave me alternative ways of looking at a given situation. When I thought about my observations, I then realised that another form of triangulation had occurred. I had observed the same place over time but with different children involved. I had built up a picture of the same activities but from different positions. It was this sustained period of observation over time that had allowed me to feel confident about the outcomes I reached. I also appreciated that my reading had added to the triangulation process. When reading stimulated thought processes to view a situation in a different way, it was like holding a coloured sheet across the observation and seeing it in a different light (see Fig 5.10).

TRIANGULATION

Over time like the spirals of action research

These triangles have continued to repeat

Different children observed in the same activities.

Analysed by researcher. Combined

The same children observed in different activities

with photographic evidence

Observations at the heart of the research

Discussed with critical friendship group

Observations compared to and related to my reading and the work of other researchers

Triangles keep adding as the study continues

Fig 5.10 Triangulation

5.12 Validation - Shaping theory as well as practice

In order to validate my research I needed to show I was shaping theory as well as changing practice and a number of important factors supported this aim:

Child development as a universal experience - an average child develops new skills at approximately the same age whether born in Australia, England or China:

- at approximately three months a baby rolls over;

- at approximately six months a baby sits up;

- at approximately nine months a baby crawls;

- at approximately twelve months a baby takes her first steps.

Although my findings would be context specific, the universal nature of child development linked to the way children learn, should make my findings relevant to other settings.

Children's play is universal - wherever children live in the world, whatever their environment is like, they play in a similar way to other children of the same age and stage of development, generally:

- a baby explores through the senses;

- a toddler is egocentric in his play;

- a three year old plays in parallel to other children.

The development of schemas as a universal tool for learning offered the opportunity to explore some interesting issues and it became clear that research from different parts of the world showed that children had a similar pattern of development through schemas. I expand on this in Chapter Six.

The process of developing learning in the outdoor environment is appropriate to all settings - the outdoor environment is unique to each setting. Children can learn in any setting *about* the environment, *in* the environment and *through* the environment.

Therefore, if child development and stages of play, in a cultural context, are universal and the process of developing outdoor education is appropriate to all settings, then my findings should be transferable. However, I am aware that there are critics of theories of universal development who would argue that it is an outdated model which does not take into account cultural differences. Hartley (1993) argued that Piaget would have come to different conclusions if his research had been done in the middle ages, when children and adults were believed to have been treated the same. He raises the question as to whether Piagetian developmental psychology was instrumental in producing children who develop through his stages. My own stance is that children do respond to different cultural and environmental factors, such as access to education and language, which will affect development in different ways but I do not see cultural or environmental differences as a reason to dismiss all features of universal child development. We can still celebrate our differences and be aware that culture and environment are powerful influences on each society and the findings of any research will need to be adapted to specific cultural contexts. Cultural factors are reflected in curriculum organisation and content. There is no window of opportunity that shuts after the early years for children learning to read and write. This is demonstrated by the later school starting age of the majority of countries around the world, compared to ours with many of these countries attaining better results than ours at the end of the education process.

Helen Penn sees universal child development as an entrenched notion of a scientific practice and cautions against exporting notions of early childhood development without the appropriate resources:

> *"Radical theorists argue that the conventional child development precepts are simply inapplicable outside the narrow contexts in which they were derived, and that the empirical methods devised for investigating them do not work in other places."* (Penn in David 1998 p10)

Penn was experienced in doing research around the world and she cautioned and argues that by imposing universal norms we diminish cultural diversity:

> *"Inappropriate Anglo-American models of developmentally appropriate practice are frequently foisted upon such countries, in such a way as to override indigenous languages and traditions, and the rich diversity of situations in which children are brought up is minimised or overlooked."* (Penn in David 1998 p22)

Despite these dangers, I would argue that some features of universal child development are compatible with cultural variations and learning from other cultures rather than imposing ones own norms on others, is an important role for the researcher to take:

> *"Perhaps what research demonstrates above all is that early childhood is constructed by its society, according to the needs and position of that social group."* (David 1998 p170)

5.13 Validation and critical friendship

The collaborative nature of action research, as discussed earlier, became part of my validation process. By taking on board the experiences of other practitioners I could form a picture of what was happening from different perspectives. Observations were discussed within our team, allowing a critical friendship group to form. By involving the whole team, everyone in the setting contributed to the data, so I was able to benefit from the experiences of everyone. I found this partnership was crucial to me as a researcher because I knew others would be able to challenge or contribute towards my thinking. I was not, therefore, working in isolation and I was reassured that other people with a good knowledge of the setting were also contributing. Validation also involved going public with

my findings and opening myself up to criticism and I saw it as part of my task to transfer knowledge gained to the wider community.

Although I could not repeat an observation I could find some common patterns emerging from my evaluations, taken from Chapter Six, such as:

- how three year olds used the outdoor space in a different way to four year olds;
- how play activities were passed on from one group to another;
- how children communicated in outdoor play;
- how an activity changed over a period of time;
- the consistent popularity of certain activities;
- the effect of offering children choices.

Each of these areas produced a pattern of behaviour which was transferable to different groups of children over a long period of time and creates a learning story which can be shared and evaluated with others:

> *"What validates each story is that it constructs meaning for the person telling it. The point of telling it is to share it with others, not to debate its credibility or validity but to have the view of the story affirmed by others"* (Elliott 1994 p134)

I knew that change had taken place in my setting, and it was not just visual change to the way things were set up, or the resources available, or the way things were planned, that made the difference, it was the knowledge that myself and the rest of the team had gained over the years which had validated the research. This was perhaps the invisible thread which ran through everything we did (see Appendix 16). Our collective team knowledge grew all the time about how children learned and developed, socialised and played, changed, matured and emerged as confident individuals ready for the next steps in their education. It was our knowledge that shaped the way we responded to children, interacted with them, planned for them and evaluated their progress.

5.14 Validation and the purpose of the research

So far my discussion on validation of research has revolved around justifying why this research should be given credibility. Elliott (1994) questioned the purpose of

research done by an outsider researcher on teachers and their practice, when the results were only really circulated among academics who read journals. Did this really represent the voice of the teacher or did it sustain *"a quite distinctive research identity in the groves of academe?"* (Elliott 1994 p136)

Elliott implied that research done 'to' teachers rather than 'by' teachers could be used solely to justify the job of the researcher at an academic level. Elliott described the validity of teachers doing action research as *"knowledge generators rather than appliers of knowledge generated by outsiders"* (Elliott 1994 p133) In my experience teachers still needed a connection with an academic base such as a university department, before their research is taken seriously. Without this connection, research tends to be read with interest but only as a piece of work done in the context of the school where it happened, with maybe one or two ideas transferable to other settings. This was a dilemma because I knew that being a practitioner researcher gave me great opportunities to gain knowledge, but how did an ordinary teacher make her voice heard, how could it be given credibility and taken seriously by others? The answer seemed to be 'only if she went down the academic path of publishing in journals' but then it would fail to reach the classroom practitioner. Working teachers make changes to their practice based on the advice from the advisory service through school visits and training days; the pressure is so great on advisors to deliver the latest initiative that they are seldom interested in the small research projects of individual settings. I did not discuss my PhD work with a Nottinghamshire school advisor or external inspector and I wondered what journals they read? Stenhouse (1979) believed that action research should contribute not only to practice but to a theory of education and teaching which was accessible to other teachers. For a classroom teacher I felt this was the most difficult aspect of action research to achieve. McNiff, Lomax and Whitehead (1996 p13) stated that action research was driven by ones own values of what was good:

> *" You are aiming to show what doing the research means in your life, both in terms of how your thinking and understanding are growing, and also in terms of how your research is having an impact on the social situation that you are in."*

My research became part of my life without it taking over and this was partly because it was based on everyday practice in my place of work but at the same time there had to be a driving force which made me want to spend a significant

part of my own time undertaking it. I think the driving force came from each new discovery and in the findings, a discovery based on an observation or something read in a book. For example, when I read that a significant surge of testosterone occurs in boys at around the age of four, which coincided with their need for big, boisterous, hero - type play, (Oberon and Slack 2007) and (Biddulph 1998), it led me to think about how we should deal with this in our setting. Should we give boys more opportunities for this type of play to take place or should we be teaching boys how to cope with the changes they are feeling and how to manage them in the confines of the nursery environment? This type of information was shared with colleagues and the implications of our new knowledge discussed. We then decided on whether to take any form of action. This example of how my thoughts and understanding impacted on our nursery setting also reflected the pattern of cycles in action research. Validation and the purpose of research demonstrated that practitioner research should be a common way of offering practitioners continued professional development.

5.15 Action research as case study

Although my main methodological approach is action research, it is also a case study. The case in question is my nursery setting which I have studied over a number of years in the role of insider researcher using observation as the main tool for data collection:

> *"The case study researcher typically observes the characteristics of an individual unit – a child, a clique, a class, a school or community. The purpose of such observation is to probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establishing generalisations about the wider population to which that unit belongs."* (Cohen and Manion 1985 p120)

Case study has become absorbed into my method as I observed and reflected on my setting. I visualised the methodological process like the layers of a trifle. (see Fig 5.11) The sponge base was the nursery setting, without which there would be no study, then came the fruit, representing all the people involved in the setting. The fruit and sponge were then soaked in custard which matched the role of observation soaking into all the corners of the setting to find out what was happening. All of that was covered by a layer of jelly which represented the unstable, unpredictable, untamed cycles of action research which I had to try and hold still for long enough to be able to make some judgements. On the top was

the cream, this outer layer was the case study which held the whole thing together and shaped its overall appearance. Any one of these ingredients on its own would not make a trifle; it is the combination of layers that is important and taking any one element away would have limited the valuable insight into the way children used the outdoor environment. The cherry on the top has to be the positive outcomes for the children as a result of the research, the most significant of which has been the development of a forest school approach to learning.

This case study was done through participant observation which allowed it to happen over a long period of time in a natural environment. There was no need to set up any special conditions for observations to take place as the theory was grounded in the findings of the research. The outcomes of my action research can be disseminated into the wider world as part of this case study and my findings have been discussed at Charney Manor in (2000), Birmingham (2003) and in the Register of Research in Primary Geography (2004).

Case study in this research fits Harrison's description (2001) as being of intrinsic interest because it focussed on one case and the attentions and meanings held by the people in that place of study:

> *"We frequently find that an intrinsic case raises questions about wider issues, for example how policy is changed as it is integrated into practice, but we do not design intrinsic cases in order to generalise from them." (*Harrison 2001 p126)

Fig 5.11 A research trifle

Bassey (1999) lists four types of case study identified by Stenhouse (1985), they are ethnographic, evaluative, educational and action research. I considered my position in this list and concluded that although I could fit into more than one, I felt action research was the most appropriate. Bassey states that action research case study is usually a single site study, he quotes Stenhouse (1985) on action research case study as:

> "concerned with contributing to the development of the case or cases under study by feedback of information which can guide revision and refinement of the action." (in Bassey l999 p28)

Although case study is a well established form of research it can be difficult to grasp the idea of using a particular situation as a basis for forming more generalisations. Simons describes this paradox as being at the very heart of case study:

> "a case study can generate both unique and universal understandings."
> (Simons 1996 p225)

This could be seen as a strength or a weakness of case study. I perceive it as a strength because a local situation can be observed, analysed and reflected upon to generate a huge amount of information which can be equally important to people in similar situations as described by Bassey. Cases of singularities are often seen as a poor basis for generalisations, if to a population of cases, but appropriate if to a similar case. Simons (1996) sees this as a strength and not as a weakness. I feel my research is a singularity which can be relevant to a wider population within the early years sector. Stake describes case study as:

> "epistemologically in harmony with the reader's experience and thus to that person a natural basis for generalisation" (Stake 1980 p64)

My theory of knowledge relates to my early years setting and as such I can empathise with this position as the language used in my study would be recognisable to people in other early years settings and therefore other practitioners should be comfortable with it. In turn, the reader's knowledge and experience would add to their understanding of any generalisations. Early years practitioners would have direct experience of much of the practical content of this case study and Stake would argue that understanding mostly arrives from direct

experience and that the skill of a case study worker lies in the provision of proper descriptions which allow the reader to:

> *"recognise essential similarities to cases of interest to them, (so that) they establish the basis of naturalistic generalisation."* (Stake 1980 p54)

Case study can be described as a 'lived in' experience. I have 'lived in' this case study for the past ten years. Experience is a powerful way to understand something. Stake introduces the idea of naturalistic generalisation to refer to sensing that which is both intuitive and empirical, and is derived from experience. This builds on our instinctive and simplest thoughts and feelings based on what we have experienced.

Through my cycles of action research I have made changes and observed outcomes which can be relevant to practitioners beyond my setting. I also appreciate why others may find it difficult to understand how one small setting could generate policy. However, work that has developed from our "singularity" has proved of interest to people beyond our setting.

> *"Case study celebrates the particular and the unique and frequently yields outcomes that are inconclusive. The paradox is that therein lies its strength for policy making, yet this is often seen by policy makers to be its weakness."* (Simons 1996 p227)

By observing a situation in a real context I hope I have given a genuine reflection of our journey, providing a powerful account of how our setting has evolved and how we have attempted to develop good practice in the provision of outdoor education. Stake (1980) sees the greatest value of case study as not necessarily in theory building but instead:

> *"adding to existing experience and humanistic understanding"*
> (Stake 1980 p72)

Throughout this study the main issue for me has been using action research as a means of undertaking the research. I found action research to be liberating in helping me to deal with a wide range of issues. Within the action research umbrella my study has also been a case study. In validating my work I have not given an objective description and as such it has not been cross checked (Elliott

1990). Validation has come through my own reflections and experiential descriptions. Within my unique situation I have attempted to unravel multiple perspectives, sometimes conflicting, in order to make practical judgements, Elliott states:

> *"The only common characteristic I can think of which covers all the case studies I have read is their focus on particular situations and events."*
> (Elliott 1990 p47)

5.16 Ethical issues

A framework for ethics is outlined by Aubrey, David, Godfrey and Thompson (2000) which includes duties, rights and harm / benefits. My intended outcome for this study has always been to benefit the children in my setting and this has guided the way the research has been conducted. As a team we have tried to respect the rights of all those involved with our setting and I accept that I have a duty to report my findings in a way which gives a true account of the actions that have taken place in my setting.

> *"The major responsibilities researchers have in relation to participants are that they will do no harm, that they will treat those who agree to participate with respect, that they will be trustworthy and that they will maintain confidentiality and anonymity if this has been agreed."*
> (Aubrey, David, Godfrey and Thompson 2000 p145)

At the start of the project parents were informed about the research and all practitioners, the head teacher and the governors were consulted. Most of the evidence has been collected through observation which, along with the use of photographic evidence, was already an established method of assessment in the early years setting. When children enter the nursery, parents are consulted about the use of photographs for assessment, information, display, curriculum activities and for educational purposes in the wider academic community. We found parents very supportive of photographs being taken and we are careful to share it with parents at the time or on 'parents evening'. The introduction of the digital camera has made this process quicker and easier than in the past. Therefore the main source of information gathering was already an established method of good practice in the nursery and parents were aware of this.

Through the observations, children were only identified by their first name and sometimes these were changed to safeguard identity. As a team, we value the interactions of our children and we respect their responses and treat them in a responsible way by taking the time to include them in each child's profile and by sharing them with parents. The sharing of observations with parents is often done as verbal feedback on a day to day basis to emphasis the positive achievements and behaviours demonstrated by their child. All staff are involved in this process. Not all parents come to the nursery due to work commitments so we introduced a 'link book' for all children, to move between home and school so that we could inform parents of their child's activities, friendships and achievements; parents in return could write comments back to us. We have found this a very positive, two way process which benefits home school links and supports the child's learning both at home and at school.

It could be argued that we do not give children the right to opt out of an observation; this would be a difficult concept to manage with three year olds as it would be impossible to work in an early years setting without observing what was going on. Part of the role of a practitioner is to from good relationships with their children, but in a research situation this could make it difficult to know if children were happy with the process.

> *"Because most children are very trusting and wish to please adults, it is often difficult to know if they feel comfortable both with what is being asked of them and with the person who is asking."* (Aubrey, David, Godfrey and Thompson 2000 p164)

I feel it is important to consider the purpose of the observation and what is done with the information contained within it. We have used the information to enable children's views, likes, dislikes, needs, experiences and interactions to be valued and acted upon which I feel is a respectful way of treating the data and has positive benefits for the child and their family.

> *"Promoting the rights of children is about moving away from the discredited assumption that adults alone can determine what happens in children's lives without regard for children's own views, experiences and aspirations. It means accepting that children, even very small children, are entitled to be listened to and taken seriously. It means that as children grow older they can take greater responsibility for exercising*

their own rights." (Lansdown and Lancaster 1994 in Miller and Devereaux Eds)

Children tend to develop a sense of ownership for their setting and the adults role is to ensure children develop this positive connection. Most of our children think the practitioners all sleep there; they are always shocked if we are spotted out of the setting! In a typical nursery setting there can be a large number of adults passing through. In the course of a week, along side the regular staff, there could be special needs support staff, students, parent helpers, other members of the school staff such as the head teacher, speech therapist, students tutors, inspectors or advisors, site manager, new parents coming to look round the setting, practitioners visiting from other settings, supply staff and invited guests who may be doing special workshops etc. Within all this intrusion we have to consider how the children will feel about the different faces they see. Usually they will be responding in a positive manner towards the children and their input is making a valuable contribution towards each child's achievements in the setting. However my experience of Ofsted inspectors is that they arrive, observe and leave, I am not sure that is a respectful way to treat a child's setting.

By promoting the rights of our children we have moved away from an idea that adults alone can make all the decisions. We have entered into a partnership with our children and we take into account their views and experiences. According to Lansdown and Lancaster (1994) this country has a resistance to the concept of rights for children which is shared by many parents, politicians, the media and policy makers. In order to redress this attitude they suggest we move away from assumptions that adults always know what is best for children by:

> *"accepting that children, even very small children, are entitled to be listened to and taken seriously. It means acknowledging that as children grow older they can take greater responsibility for exercising their own rights."* (Lansdown and Lancaster 1994 p21)

I have found it difficult to write about ethical issues in relation to colleagues. This is because we have been such a close team on this project with everyone taking part in observations, discussions, taking action and informing the way our curriculum is delivered. I am an equal participant in this process and we all gain from each others experience. My additional role has been finding the theory behind the practice and drawing it all together. I am privileged to work with such

a professional and committed team of practitioners and I hope this study is testament to their hard work and dedication towards developing good practice in our setting.

In December 1991 the UK government ratified the UN Convention on the Rights of the Child (Nutbrown 1996), article 29e includes *the development of respect for the environment*, through undertaking this research the children in my setting have certainly had the opportunity to achieve this commitment.

5.17 Summary

In this chapter I have established myself as qualitative researcher using action research as the most appropriate methodology for this study. I have given examples of action research cycles relating to this study showing how the process of action, observation and reflection have led to changes being made in our setting. I have demonstrated that I am a critical action researcher looking to make changes that will have a positive impact on the children in my setting and I considered the importance of basing my research on a case study. I have explored the impact of change on different groups involved in this study and I was surprised by the implications of power issues and politics within my research journey, this relates to my This chapter links to my second theme -

The impact of national policy. I have discussed how the research process led me to a better understanding of the power of being a teacher researcher and how the research process helped myself and my team overcome some of the pressures involved in implementing national and local policy, which in turn enabled us to make positive decisions about the way we delivered the curriculum. I have found the research process to be empowering for me as a practitioner which is something I was not anticipating at the start. The collaborative nature of an early years setting has made action research most appropriate. Our team of practitioners have been important to me as my critical friendship group which I discussed as part of my validation process.

Chapter Six
Taking action

This chapter includes the main body of evidence taken from the observations of children in my setting. It also builds on the contents of Chapters One and Two, focussing on children's learning and its implication for practitioners and the curriculum. The implications are discussed with reference to the work of Vygotsky, Piaget and Bruner on the learning process, the role of language, social interactions and the role of the adult in supporting a child's learning. My observations constitute evidence in support of my developing theories concerning the way in which children learn and interact in the outdoor environment. The observations are located in and drawn from the action research cycles as they unfolded. The outcome has been the emergence of one major research cycle which started with the small scale garden within the nursery setting and led to the forest school approach using all the school grounds. The journey through this major research cycle involved five mini cycles which are discussed under separate headings in this chapter. Throughout this chapter, I focus on a range of strategies involved in the learning process and relate this to effective provision outside. Most of the observations are of children interacting in the outdoor environment but some are of children working inside, as in reality it was difficult make a distinction between the two in free flow situations. Work in this chapter relates to my first theme - *Children's learning.* The development of this theme will lead me to a better understanding of the impact of learning dispositions on children's outcomes, through observation, action and reflection. I consider the importance of schemas in the learning process, linking them to my observations. I introduce the role of schemas as a method of developing concepts. This chapter will also relate to my second theme- *the impact of national policy.* This work includes the value of being a practitioner researcher and I discuss some of the tensions that exist within the early years sector in relation to theory and practice. Although this research has taken a bottom up approach and empowered our team to make changes, it was done within the wider framework of political constraint which has been discussed in Chapter Two.

6.1 The power of observation

My data has been collected through observation and realised that I had a huge amount of useful information which was giving me a unique insight into the way children in our setting learnt and interacted but I struggled to find a manageable way of making sense of it all. I could describe what I had seen and heard but I was unsure how to analyse what I had collected. For example, observations showed how a group of children developed a game over a period of time. I realised this gave an interesting insight into how children engaged in co-operative play but I could not see how to take the analysis a step further and link it to how the children were learning.

> *"Because the teacher observes children closely and attempts to evaluate their valid contributions to the negotiation of meaning, the teacher is able to accumulate deep understanding of stage levels of cognition in children as well as other aspects of development."* (Athey 2007 p44)

Changes made to our outdoor play area, such as introducing the sensory garden, became well established and generated a mass of information about how the space was being used. Some of these observations were just small snippets in time but they offered exciting information about how our children viewed the outdoor space they were using, for example:

The willow tunnel burst into leaf to make a dark passage that Holly (aged 4) referred to as "the jungle" as she walked through it.

Molly (aged 3) took her Mother by the hand and said "Come and see my beautiful garden."

Ross (aged 3) came to nursery every day with a bag containing his overalls and boots so that he could change into Bob the Builder for outdoor play. At tidy up time every day he insisted that he needed to take a nursery wheelbarrow home with him. Ross was most upset that it had to go into the shed each night until he had a wheelbarrow of his own for his 4th birthday. Thomas loved the wooden truck so much that his Dad borrowed it over night to take all the measurements so that he could build him one exactly the same for his birthday.

Parents commented on the interest their children had shown at home towards their environment such as Chloe who took it upon herself to be in charge of watering the sunflower seeds every day. Water was of special interest to Chloe. At home her parents commented on her interest in watering the plants in their garden. She did not tell them about her watering role in the nursery garden. Parents were often surprised by their child's knowledge and enthusiasm for outdoor activities.

The outcome of our observations was the emergence of questions which led to research cycles. There was one major research cycle which started as a small scale project to create a sensory garden within the nursery outdoor environment and led to a major project to introduce a forest school approach using all the school grounds. The journey through this major research cycle involved five mini cycles. Each mini cycle was a step towards the outcome of the major cycle and shaped the way our outdoor space developed. The observations generated a mass of information and I am aware that I had to be selective in the themes I highlighted. Inevitably some important issues, such as gender, were left out. Most of the observations are of children interacting in the outdoor environment but some are of children working inside. This is because the boundaries between inside and outside are not fixed, also the implications of the observations impacts on the outdoor activities. Therefore observations draw on children in both contexts.

One of the difficulties we faced as a team was, by making observations we usually raised issues that left us with more questions than answers. Fig 6.1 shows how the complex web of observations was drawn into the cycles of action research. It demonstrates how the action research process developed and led to outcomes which shaped the changes we made in our setting and which led to theories being developed. This diagram illustrates our journey for developing the outdoor environment beginning with the small scale project establishing a sensory garden.

OUR OBSERVATION CYCLES

Children are observed using
the outdoor play area

Children spend most time on
concrete area.

We could use the space better.

What else can we develop?

Children make much better
use of the area.

Create a sensory garden,
community project.

Observe the changes.

1

Where do children play the
most outside?

Children are observed at play.

Those three areas will be
developed in our outdoor
garden area.

A critical friendship group forms
between practitioners to discuss
the observations.

Most used areas are:

The sensory garden, the
wheeled toys and the
digging pit.

More observations.

2

All other cycles come
together here.

Action: Forest School is
established.

Forest School ethos
begins to move into main
school.

Begin observations of
specific children.

Children show progress in
important dispositions for
learning.

Team discuss observations
& Forest School sessions.

Activities are modified
and practice is refined.

3

Fig 6.1 Observation cycles in our setting

6.2 The initial observations of outdoor play

From an initial starting point of developing a sensory garden some themes emerged as common features of outdoor play, each one becoming a mini cycle of action research. I discuss each theme in turn in relation to the observations, including reference to the action research process. I then reflect on the implications for the practitioner.

The themes are:

- *Action cycle 1*   *Communication and the development of cognitive structures in the outdoor environment*

- *Action cycle 2*   *Children learning through observing other Children*

- *Action cycle 3*   *Offering choice in outdoor play*

- *Action cycle 4*   *Children's use of physical play activities*

- *Action cycle 5*   *Patterns emerging in play situations linked to the development of schemas*

Out team then took the knowledge gained from these smaller cycles of action research within the context of outdoor education and implemented a much wider use of outdoor education through setting up a forest school approach. For our team, the main cycle was the journey from developing a small scale sensory garden into a large scale project of establishing a forest school approach to learning. The outcome of the main cycle was a project which went physically beyond the boundaries of our nursery garden, into the main school grounds and beyond. The project also went beyond the curriculum boundaries of early years education by involving the rest of the school, by making links with the local secondary school and by forming a forest school cluster group involving other settings in the county. I return to this major theme later in this chapter but I begin by describing the five mini cycles.

6.3 Action Cycle 1
Communication and the development of cognitive structures in the outdoor environment

Outdoor play appeared to provide good opportunities for children to develop a range of social skills and it offered opportunities to communicate in a variety of ways. Communication could be verbal or non-verbal. Non verbal communication sometimes involved gesture, sometimes simply observing another child and then imitating the behaviour or responding to it in some other way. Some activities involved children working in pairs, at other times they were in small or large groups. I would define up to four children as a small group and more than four as a large group in a nursery setting. In the following section, I offer examples of children using a range of communication skills. Communication issues appeared as a common feature of my observations and four aspects became recurrent features:

> **1a**   *Communication is not dependent on speech.*

> **1b**   *The use of gesture and observation for communication - children appeared to use less verbal communication and more gesture and observation **of** each other to communicate **with** each other when using the outdoor environment.*

> **1c**   *The role of monologues in the cognitive process.*

> **1d**   *Higher level communication skills **-** children's verbal communications were at a higher level demonstrated by their use of speech for negotiation, critical thinking and problem solving in the outdoor environment.*

I offer examples of each of these points in turn.

1a Communication is not dependent on speech
An example of a child communicating without being dependent on speech - Carianne:

> *Carianne did not want to talk to anyone at nursery and her speech was limited at home. She said odd words when she forgot about 'not speaking' but Carianne was the queen of gesture. She could get a practitioner to invite her to join an activity, put on her apron, write her name on her work and then praise her efforts by simply using her eyes. Other children were also able to understand her by reading her eye movements. By observing the activities which Carianne liked to do we were able to support her in them and these became the activities which*

first engaged her in speech. They included, drawing faces, using the building site outside, the sand pit and later playing with dolls in pushchairs - all of which happened outside. Carianne was small, dainty and blond but when she first spoke it was in a loud booming voice which took everyone by surprise!

This observation suggests the outdoor environment supports children's non verbal communication. A study by the University of Southampton into the ways three year old children communicate and make meaning at home and in pre-school showed they made meaning "multimodally" through talk, body movement, facial expression and gaze:

> *"The findings imply that the current focus on talk in the early years may be detracting from the diversity of ways children make and express meaning."*
> (Flewitt 2005 p207)

It appeared that children found it conducive to develop their non verbal communication skills outside and if children need good non verbal skills to enable them to make meaning (Katz (Ed) 1984), this is a sound argument for using the outdoor environment to maximise learning opportunities. As discussed in Chapter One, Vygotsky believed that instruction was at the heart of learning, but not instruction in the sense of the teacher having the knowledge and the child being the empty vessel to be filled. Instruction in his interpretation involved the adult supporting a child's learning. Vygotsky saw speech as a partner to the cultural context of the learning situation (Nutbrown 1996).

1b Gesture and observation for communication
Children appeared to use less verbal communication and more gesture and observation *of* each other to communicate *with* each other when using the outdoor environment. An example of children using less verbal communication and more gesture and observation; Liam and Harry aged three, playing in the soil pit:

Illustration 12 Communicating through movement

Children's interactions in the soil pit.

The soil pit was originally a sand pit but even with a cover on, it became too waterlogged to use for most of the year so we changed the sand to soil and it was put in use for most of the year. Liam and Harry each had a spade and a bucket. They had a toy digger between them. First Liam used his spade to fill the digger with soil. Harry filled his bucket with soil and at the same time observed Liam. Not a word was said between the boys who were side by side. Liam then moved the digger across to the other side of the pit and tipped out his load. He then went back for his spade. In the meantime, Harry came over and began to fill the digger with the soil from his bucket. When Liam looked across and saw what Harry was doing, he still did not speak. He observed Harry then began to fill his own bucket with soil. Harry then drove the digger back across to Liam and tipped out the load and the process began all over again. This exchange of roles carried on for ten minutes until it was interrupted because it was time to tidy up.

It appeared that the boys were having a two-way conversation, not in words but in actions and observation. The boys were clearly engaged in imitating actions and changing roles. I have found this to be a common form of communication in outdoor play. My initial instinct was to try and increase the amount of spoken language taking place outside as speech is so crucial to a child's future success. However, on reflection these children were using effective communication skills and

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perhaps we should build on this rather than try to interfere. Adult interference can have a negative effect on the activity as the following observation demonstrates.

Children effectively using non verbal communication.

A group of six children were re-telling the story of Mr. Gumpy's Outing by John Burningham. They had a fish box outside under the shade of a tree to use as a boat, a picnic basket and a set of animal masks. One child took charge of the game and became Mr. Gumpy, others picked out an animal character; they put on an animal mask and got into the boat. Most of the communication was non verbal apart from Mr. Gumpy who told everyone when to fall out of the boat. The children made different animal noises and scrambled around on top of each other pretending to escape from the river. Because the children all knew the story line as it had been told the previous day, there was no need to explain what was going on. The group expected that everyone knew the structure of the story and acted accordingly - all they needed was a cue to fall out of the boat. The story was repeated by the group a number of times with different children taking on the main role each time.

A practitioner had observed the children engaged in this role play and her instinct told her not to get involved but the previous day, following a senior management observation, it had been suggested that practitioners take more of an active role in children's outdoor play giving more planned structure to activities. The focus of this senior management observation was 'independent time of the literacy hour' As early years' practitioners we had to interpret this statement into foundation stage language and took it to mean independent play following a language input. Practitioners therefore engaged the children in a story session followed by the opportunity to re-tell the story in role play. The feedback included the comment:

> *"Structured and planned deployment of all available staff needs to occur to maximise the learning opportunities." (9.6.04)*

Because of this pressure to increase staff intervention, the practitioner walked over to join the story. Despite taking on a role and getting in the boat with the children, within two minutes the children had dispersed to play elsewhere. Before joining the game she had expressed her concerns to another practitioner about the effect her interaction may have on the game. Knowing when the learning situation will benefit from adult support or find it a hindrance is a skill which takes time and experience to learn. This practitioner was satisfied that her own initial judgement was sound

as her arrival in the game cut short some lovely imaginative play and story telling. It is a sharp reminder that adult intervention is not always a good thing and sometimes doing the difficult thing like leaving well alone, is the best option. The examples of observations given so far would support Vygotsky's (1962) findings that action is a way in which a child responds to the world and that learning is achieved through a variety of social settings with significant people, both adults and peers.

1c The role of monologues in the cognitive process

Monologues are the verbal commentaries which children make as they engage in an activity. Speech therefore becomes a partner in that child's learning process. An example of speech being a partner to the learning situation was highlighted by some observations our team made during a map making activity:

> *A group of children was engaged in drawing maps relating to the story of Goldilocks and the Three Bears. The adult who was working with the children noticed that although they did not require any direct intervention from the adult, the children all used the adult as a sounding board by describing, throughout the activity, what they were drawing. The children produced some quality work from this activity. The adult was then called away. When she returned the children were still engaged in the task but the quality of the work had declined. The children seemed to need an adult to talk their thoughts to, in order to achieve a higher level of work. To see if this was the case we then repeated the activity in the same way with the afternoon children and exactly the same pattern emerged.*

As Vygotsky (1978 p26) said, speech becomes increasingly important as a situation becomes more complex and if speech is not allowed to happen, the child may not be able to complete the task. He concluded that *"children solve practical tasks with the help of their speech as well as their eyes and their hands."*
This view is also supported by Wilson (in Louv 2005) when stressing the importance of using the hands for brain development. Certainly in this activity the children were talking through an activity as they used their hands to draw the maps and their brain to remember the story. The need for children to use monologues to aid learning has implications for teachers and practitioners who reduce talk time in the classroom. Piaget (1959) thought that when children used monologues it showed an inability to take account of the perspective of another and that as they matured they became more logical and were therefore able to

engage in socially meaningful verbal exchanges, where as Vygotsky considered these monologues to be highly social, a form of communication with the self which reflected the child's culture and was a framework for thought, the two being inextricably intertwined. My research has led me to agree with the findings of Vygotsky and another example of this was Chloe:

Chloe and the water

> *A structure was created in the nursery garden using a climbing frame and a series of small drain pipes with collection buckets at the bottom of the pipes. Chloe aged 3 had a special interest in water and she spent forty five minutes filling her container with water then climbing up to a pipe, pouring the water through the pipe then watching it come out at the bottom. As she worked she kept a running monologue to herself of what she was doing. For example "I'm going to get my water from the blue bucket this time. If I climb that way I might lose my water. Down it goes, there it is, that's mine."*

1d Higher level communication skills

Children's verbal communications were at a higher level involving speech for negotiation, critical thinking and problem solving in the outdoor environment. The following observation demonstrates these skills within a social group activity. It links the observation of Cam and Thomas described later in this text with an observation of Carianne described earlier. Carianne had been dependent on non verbal communication. This observation highlights how Carianne began to use verbal communication to organise, negotiate and problem solve while playing outside. At this time she did not demonstrate this level of skill in the indoor setting.

Carianne and the builders

> *Thomas had been inspired by our topic work on London, in particular the work on bridges. In outdoor play he directed a group of boys including his brother Joseph and his best friend Troy to be his team. They used fish boxes and big bricks to create an elaborate structure of ramps and towers. They tested the bridge with cars and when they were given a boat they added water underneath. This play carried on from day to day. It did not seem that long ago since Thomas was acting as gopher to Cam who directed building play. Now Cam was in school and Thomas had taken over as the team leader. Other children had observed and admired the bridge building but had not got involved. One day we rotated our groups in outdoor play so that only groups of up to twelve went out at once. This can allow different children access or confidence to try different things. Carianne,*

*when inside, chose to limit the amount she spoke but she had developed a small
friendship group of Abbey and Katie and they liked to play with dolls. Once
outside in a small group, Carianne began to build with the bricks. She used
spoken language to direct others to help her, for example telling children where
to place the bricks. Soon she had built an impressive bridge and the group were
very proud. The following day everyone came out together and Carianne went
straight to the bricks. A group of girls joined her including Abbie, Danielle, Katie
and Emilia. Carianne told the girls where to place the bricks and planks; if it was
not in the right place she told them to move it. Thomas came over and tried to
move the bricks but Carianne verbally protested. Thomas ignored her and
continued to move them while directing Troy to help. A practitioner told him to
leave them as Carianne and the girls were already using them. Thomas had a
look of disbelief on his face. He then waited for the adult to leave before finding a
student to ask her to make Carianne give him some bricks, but he was again told
to wait until the group had finished their game or to join in. Troy was riding a
step bike so Thomas got on the back. They peddled round the garden and
stopped each time they got to the building work to observe, pass comment and
generally look amazed that the girls could do their building work. Meanwhile the
girls had finished building and had moved on to get buckets of water to paint the
structure they had made and some of them tested cars along the planks. Lewis
and Joshua joined the group. Carianne continued to use spoken language skills to
direct and co-ordinate the activity. When asked what she had built she did not
use the word 'bridge' but said "cars go over." Carianne's level of confidence and
language were much higher in this outdoor situation.*

6.4 Implications for us as practitioners

Through my observations I have observed speech and other ways of
communicating as being important facilitators in this learning process. Piaget
believed that knowledge began when it was communicable and controllable and if it
cannot be shared by others, saw it as belief and not knowledge. (Bringuier 1980)
As practitioners in our setting, we have become aware of and to value
communication in all its forms, both verbal and non verbal, when working outside
with children. We need to be a listening ear to a child's personal thoughts as well
as trying to extend vocabulary and develop sentence structures. We need to be
aware of the danger of jumping in too soon with verbal responses therefore not
allowing children time to use gesture and movement as a valid form of
communication.

Piagetian theory (Piaget 1959) is based on having first *logic related to action* and then *logic related to reasoning*. Action logic is seen as separate to reasoning logic because action logic lacks representation. Too much attention is often given to verbal responses and not enough attention given to actions. This linked well to my observations of children's non verbal interactions with each other. When young children have been exposed to a number of experiences they can then imagine that experience without being there, and thus it becomes representational. One of the functions of symbolic representation is to reactivate the original experience, leading to stability of knowledge. The educational implications of this are that, before children are secure in a concept they need lots of practical experiences as well as opportunities to communicate in different ways. My observations indicate that the outdoor environment is rich in opportunities for this to develop.

Children apply their limited experiences to make sensible deductions, for example, James aged five, who was very upset about the Easter story and asked "Why did they kill the baby?" He had used his recent experience of taking part in a nativity play about the birth of Jesus and related it a few months later to the death of Jesus. His limited life experiences had not allowed him to understand the concept of time in the story of the life of Jesus. Another example was Milly aged four, who contributed to a discussion about the planets, some children had suggested names of planets including Earth and Mars. Milly added "and Goofy" a practitioner quickly realised what Milly was thinking and said "do you mean Pluto?" This demonstrates how Milly is relating her new knowledge to something she was familiar with in the form of Disney characters. If practitioners are looking to provide meaningful learning experiences, where thought processes can develop, then surely our starting point should be based on what a child knows rather than what a child does not know. The EYFS is based on a set of goals which the majority of children are unlikely to know when they enter a setting at the age of three years regardless of their stage of development in thinking skills.

The outcome of this mini cycle was to raise our awareness of the need to value a child's non verbal communications such as gesture and to allow children more time to talk to us about what they are doing (monologues). We have learned to value the role of the adult as a listening ear and sometimes as an observer restraining from joining in with the activity. We discovered that through free choice outdoor play combined with a regular forest school experience, we have been able to

support more opportunities for higher level thinking skills to develop. Our outdoor environment is not seen by practitioners as 'just a different place to do activities', it is seen as valuable to each child's personal development and achievement.

6.5 Action cycle 2

Learning through observing other children

Through the observation process, I identified a pattern emerging of children observing each other, as demonstrated earlier by Liam and Harry in the soil pit. This showed how children can use observation to develop play between each other. In this case the observation led to a series of imitations showing that one child was acting as the 'more expert other' in line with Bruner's theory of peer tutoring. Another example of children observing each other is Joseph:

Joseph and the traffic light

> *Joseph had never spent time away from his mother until he started nursery at the age of 3. He spent all his time inside the nursery, working next to an adult and chose one practitioner to be his substitute mother. Outside he was unable to interact with other children but he was guided to be in charge of the traffic light. He changed the light to stop and start for the children playing on wheeled toys. From this position he could observe other children without having to play with them. He was also having to make interactions with them and therefore making his first independent steps away from adult support. This type of activity provided a secure transition for a child who found social interactions with peers difficult.*

In this situation Joseph needed an adult to be a substitute for his parent. He was not used to being left to play with other children and had little confidence in himself as an independent social being. The adult had to facilitate a role for Joseph so that he could feel secure in his first independent steps to play with his peers. This is a difficult balancing act for a practitioner who wanted to develop Joseph's independence but not to put him under too much stress. It would have been within Joseph's comfort zone to stick with the adult and bypass interactions with other children.

> *"Children need time to do things which we adults may find uncomfortable – like watch others but not do much themselves as they try to gauge what the play is about and how they can join in."*
> (Grenier 2006 p14)

The following observation also demonstrates the need for children to observe each other.

Children's interactions on the wheeled toys

> *Most of the children using wheeled toys were engaged in games or activities connected with other children but one group of children used the bikes in isolation; this group consisted of the youngest three year olds who used a bike as a means of moving around the play area observing the activities of others. The bike seemed to act as a secure base from which they could explore their new environment; it also meant they could quickly move from one activity to another and therefore observe a number of different play scenarios at the same time.*

I concluded that three year olds needed to observe in order to learn and in the outdoor environment they appeared to feel more secure if they were attached to a bike rather than standing alone. These children did not want to be engaged in a game, they were content to observe and being on a bike probably reduced the risk of being drawn into the game. The sense of space offered by the outside environment probably helped these children to feel less daunted by the number of children grouped in a nursery setting. Another example of the observing process in action was Alfie, in the following observation Alfie carried out this task both inside and outside.

Alfie and the post-it note

> *Alfie aged three and a half, had a schema which appeared to be connected with emergent writing; he created circular movements on bits of paper. To achieve this he only wanted to use a post-it note and a red pen (to be like the teacher!) so every day he had to go through a process of acquiring the pen and paper before his schema could be practised. This led to a ritual conversation with the practitioner to gain the tools he needed. Once he was armed with his paper and pen it gave Alfie confidence to move around the setting, he could then stand and observe other children at play and feel he had a place to be there as he pretended to take notes. At home, Alfie pretended to be the teacher and the rest of the household had to call him by the teacher's name. Alfie's scribbles did emerge into the formation of letters in his name but I do not believe that was his main motivation. The post-it-note gave him a prop as he developed the social skills and confidence to make friends. His actions allowed him to move to the*

places he wanted to observe without having to join in with the play. He was the note taker standing on the edge and this enabled Alfie to take a huge leap in social development by suddenly forming friendships. He began to pass comments on the activities he was observing and by drawing attention to himself he quickly attracted a friendship group to play with him. This was a new experience for Alfie and it made him very excitable!

It appeared that a schema for writing had been used as a tool to develop other socially unrelated skills. Alfie provided himself with the opportunity to use observation as a base for learning and he combined this with a schema for writing in circular movements.

6.6 Implications for our setting

These observations highlight the way children learn by observing and then imitating what they observe. In order for Alfie and Joseph to make a friendship group they had to observe how other children interacted with each other. Once they felt confident to imitate this behaviour they were able to join in and make friends.

> *"Imitation was thought of as a purely mechanical process but psychologists have shown that a person can only imitate within their developmental level."*
> (Smith and Cowie 1991)

This developmental level must be their ZPD. If children learn by imitation then they need to be given time to practice - if they are developmentally ready they should be able to imitate the play they had observed. For our setting this highlighted the importance of giving children time to stand back from the group and watch and we understood it was not always appropriate to engage children in constant activity. To develop good practice for each child's learning process we tried to pitch a fraction beyond their present comfortable developmental level but within their ZPD to be most effective. Joseph was taken beyond his comfort level when he was put in charge of the traffic light but he was able to respond to the task and it was therefore within his ZPD. I have found the concept of a zone of proximal development very helpful in bridging the gap between identifying a schema and supporting a child and moving them on. As practitioners we act as the knowledgeable other person who can intervene and support the child moving them on within their ZPD. Bruner's notion of peer tutoring is also critical when children

work together within their zone of proximal development and learning occurs enabling this joint intellectual activity to become internalized. (See Fig 1.6 in Chapter One) Intervention must therefore be within the ZPD to be effective. This is where I have found the individual observations of a child to be so important. The importance of an ability to imitate as a step in the cognitive process and its significance in learning is indicated in this observation:

The changing places game

> *In our forest school experience we took children to an outdoor classroom area where there was a circle of benches. We played a game where children had to change places with another person but they had to name the person they wanted to change with. Some children picked this game up very quickly, others found it very difficult and even though the person who had chosen them may have been moving towards them, they still found it hard to orientate where to go. The children who could imitate quickly were the ones who succeeded in other areas of learning and the ones who found it difficult were the ones we had concerns about and needed more support in other areas of their learning.*

Vygotsky introduced the idea that what a child can do with the support of others might be a better mental test than looking at what a child can do alone. This has important implications for the practitioner. Vygotsky was beginning to identify that different children have different styles of learning and a child may not reach his potential if these needs are not met. Vygotsky (1988) said that a full understanding of the ZPD meant re-evaluating the role of imitation in learning. Building on my learning from action cycles one and two in which communication and observation emerged as clear contributors to children's learning in the outdoor environment, the next step was to set up an environment which facilitated children's ability to observe and communicate. This led to the third cycle of action based on giving children more choice and empowerment.

6.7 Action cycle 3
Offering choice in the outdoor environment

This cycle focussed on the question - *How do we introduce children's choice into the activities for outdoor play?* The outdoor play area was set up every day by members of staff and we tried to ensure that there were activities to cover all four areas or zones that were planned for in the original McMillan nursery garden, as this also effectively covered the Foundation Stage curriculum, but the children had little say in what was put out. At the time, due to safety factors, it was impossible

to allow children to get things out of the shed for themselves. To allow choice to take place we introduced a board and a group of photographs taken of the outdoor play activities. The photographs had a fabric fastening on the back to enable children to stick them to the board. The children were then asked to put on the board, pictures of the activities they would like outside the following day.

Illustration 13   Making choices for outdoor play

We rotated this activity around our groups so that over a period of time everyone had a turn. The initial choices were made in the following ways:

- at first the children picked out a photograph which included themselves;
- the second choice was a picture of a friend;
- the final choice involved looking at the actual activity.

However as time went by they began to see the implications of their choices and they started to be more selective. On an occasion when the wheeled toys had not been chosen on the photograph board, the children were horrified the next day to find there were no bikes out and what was even worse, it was their fault! One initial problem we encountered was that children wanted to put everything out and this problem was solved by limiting the number of pictures they could choose. This had the effect of making the children more discerning in their choice of activity. The photographs allowed children choice in outdoor play; it also bridged the gap between indoor and outdoor play and it gave staff an insight into the children's perspective of what they enjoyed about outdoor play. Over a period of time the most popular activities were:

1. *the wheeled toys; (See Illustrations 14 and 15)*
2. *the soil and digging pit; (See Illustrations 16 and 17)*
3. *the sensory garden, including, watering, planting and observing living things. (See Illustrations 18 and 19)*

These results matched my observations which showed that these activities were consistently popular. Three of these activities could be done with or without adult intervention but the planting activities always involved an adult working alongside.

Illustration 14 Popular activity: wheeled toys

Illustration 15 Popular activity: wheeled toys

Illustration 16 Popular activity: digging pit

Illustration 17 Popular activity: digging pit

Illustration 18 popular activity: working in the garden

Illustration 19 Popular activity: watering the sensory garden

At a later date we increased our storage facilities for outdoor play equipment and so we were able to offer children the opportunity to help themselves to the equipment they wanted to use outside. This was a fantastic development for our setting as the children could be independent learners and they could choose to develop that learning activity over a period of time. Earlier in this chapter I referred to the changes that were made to our outdoor area following criticism from a school inspector. The purchase of new sheds was the most positive outcome from this report. We had been striving to offer choice for many years and it revolutionised the way our outdoor play could be run. The first shed is the 'workshop shed' containing all the building materials and gardening equipment, the second shed is the 'physical shed' containing all the wheeled toys and small apparatus and the third shed is the 'creative and imaginative shed' containing small world activities and role play materials. (see Fig 6.2 and Illustration 20)

Illustration 20 Making choices in outdoor play

OFFERING CHOICES IN OUTDOOR PLAY - 3 MAIN CYCLES

ACTION
Take photographs of activities outside so that children can make choices.

OBSERVE
Children used the photography of themselves first, then friends and finally by the activity.

REFLECT
Children became very selective and good at making choices.

ACTION
Some new fixed equipment arrives for climbing. Sensory garden is developed. Cars are stored outside.

OBSERVE
Children can access all the above activities without needing to ask practitioners to get them out.

REFLECT
Children used fixed equipment on a daily basis but needed adult input to keep it fresh and still needed adults to access other activities further.

ACTION
New sheds arrive for equipment. Can be divided into themes. Children can access sheds themselves.

OBSERVE
Children can take things out of any shed if the door is open. Play scenarios can now carry over a number of days.

REFLECT
Children have more choice in outdoor play. Better balance of power between adults and children. Children sustain play activities over time. Children make lots of choices.

Fig 6.2 Offering choices in outdoor play – 3 main cycles

A further development to offering children choice in the outdoor environment came when, as a team, we developed a forest school experience. The nature of the forest school approach lends itself to children making choices. We wanted to find out if this approach had any additional impact on the children in our setting so we set up a small action research project which identified children we felt might not be able to take full advantage of the school system. These were children who did not lack ability but who lacked the dispositions for learning as discussed in Chapter Three. We tracked these children and observed them in the nursery setting and in the forest school environment. These observations showed that children had much higher achievement levels in dispositions for learning when they worked outside. Gradually the progress they made outside was reflected inside and because they also found the learning environment less stressful outside, they were able to take the lead and initiate ideas. By being given the opportunity to make choices at forest school, children were able to develop their thinking skills:

Josh at forest school

> *An example of this was Josh who invented games for everyone to play at forest school. His favourite game was to make a cross out of sticks and string then hide it among the trees. He placed little stones on top of the sticks which he referred to as treasure. The rest of the group had to find the treasure and take it back to the circle of logs we used as our base. Josh had not demonstrated this type of thinking and learning in the indoor setting. Inside he found it difficult to focus on activities and his concentration was limited.*

6.8 Implications for the practitioner

When I began my research there were limited expectations for the curriculum to be delivered outside and children were not expected to be outside for extended periods of time. Now 'free flow' is in vogue again and settings are expected to offer children the choice of indoor or outdoor play for as long as possible. This shift in thinking has given practitioners some great opportunities but at the same time involved professional risks. In our setting we moved on from offering choices through photographs to offering real choices using the sheds. This of course required space and money so we had to wait a long time before we were given the opportunity to make it happen. However we could embark on the project knowing that it would not take long before children grasped the idea of making thoughtful choices. The outcome of allowing children to make choices is seen in the

development of thinking skills and problem solving, in other words the relationship between thought and action. It is the relationship between thought and action which helps children to make cognitive leaps in their understanding. (see Fig 6.3)

THE RELATIONSHIP BETWEEN THOUGHT AND ACTION

ACTION

Cycles or spirals of assimilation and accommodation leading to the conceptual development

Conceptual development leading to cognition
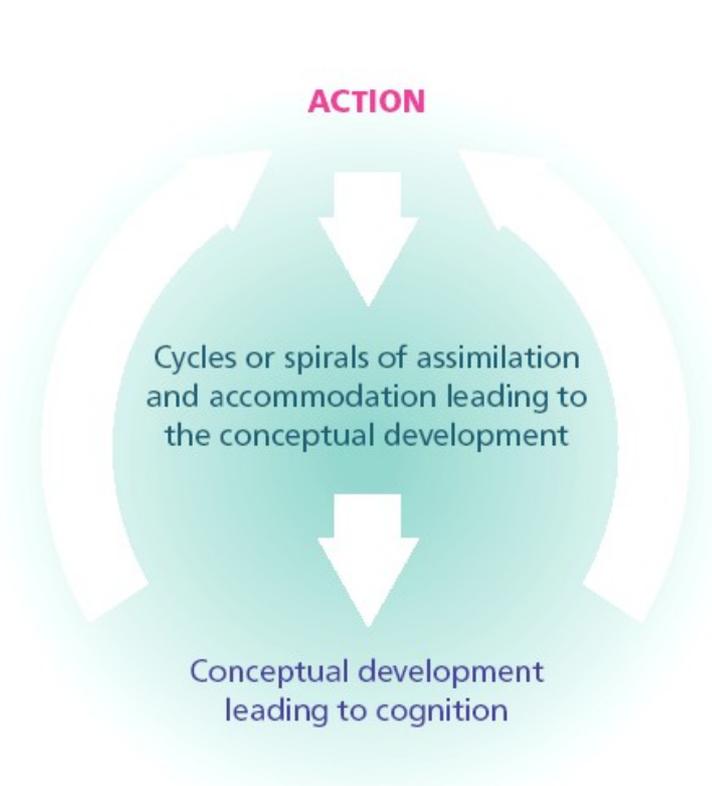
Fig 6.3 The relationship between thought and action

It is difficult to identify the relationship between thought and action but in a nursery setting it is easy to identify a child who is not making good links. These children find concepts difficult to grasp, struggle with problem solving and often get into trouble for not understanding the consequences of their actions. The following observation illustrates this:

Jake playing in the water tray

> *Jake was a child who found new concepts difficult to learn, despite being told not to squirt water out of the water tray because it made the floor slippery and other people got wet, he was unable to control his urge to splash the water. Every day he was surprised that this action got him into trouble.*

Athey (1990 p37) says that one of the most important steps forward in knowledge is "*where there is a new co-ordination between two separate aspects of knowing.*" Athey describes these moments as "*when the penny drops*", "*Eureka!*", "*putting two and two together*," when what is known leads to what becomes better known:

> "*To construct meaning, conscious attention must be internally focussed. Conscious attention cannot be internally and externally focussed at the same time. It will either be externally focussed to absorb information or internally focussed as it processes this information to make sense of it.*" (*Shaw and Hawes 1998 p31)*

One example which highlighted this for me was when my son, who has dyslexia, found it a constant problem when asked to copy from the board because the teachers always had to talk as the children were writing. His external focus on the writing prevented him from internally absorbing the teacher's verbalisations.

As practitioners we have a huge responsibility to do our best for each child in our care. By offering children choices in their learning we can make positive differences. This lies at the heart of the constructivist approach and Piaget's understanding of how humans constantly adapt to their environment through a process of assimilation and accommodation:

> "*Assimilation is when a child absorbs new knowledge and accommodation is when new knowledge has the effect of changing the old knowledge. A schema is a repeated pattern of behaviour and practitioners can tap into a child's schema by extending it and by helping the child to link their present learning to previous experiences. The activity is based on action, children learn when they are engaged in action.*" (Piaget 1971 p139)

I discuss schemas later in this chapter.

The implications of offering children choices which develop their thought processes through taking action, led to the fourth action cycle which focussed on the play opportunities for children in the physical area of learning. This next research cycle looked at improving the opportunity for physical play through outdoor experiences.

6.9 Action Cycle 4
Children's use of physical play activities

As a team we wanted to observe the physical outcomes for children using the outdoor space. Practitioners spend time planning activities to meet objectives set by the curriculum. It is often difficult to find time to observe if those objectives have been met by the children using the activity. Setting up a physical activity, such as a climbing structure to meet the requirements for the area of learning for physical development seemed straight forward, but the observed outcome was very different. Instead of gaining physical skills, these children used the activity as a base for observing other children at play. (See Illustration 21)

Illustration 21 Children make their own objectives

Children's use of a physical play activities

The staff had set up a physical activity using planks, tyres and barrels for children to climb along and through. The physical objective was the key purpose of the activity. Alice and Thomas, both aged three, approached the activity. Both children had a quiet nature and lacked self confidence. They walked behind each other along the plank, across the tyre and into the barrel, but they did not emerge out of the barrel. They sat inside the barrel with their feet up the sides. They observed other children as they passed by, making comments to each other about these children and their games. Other children, seeing Alice and Thomas in the barrel, made no attempt to ask them to move but simply went round them. After ten minutes the children emerged and went on to play in the water. As an activity this should have met the physical objectives of balance, co-ordination, agility and control using climbing equipment. In reality it turned out to be a social activity, observing others and forming a relationship with peers.This demonstrated children's ability to use the activities to meet their own needs and demonstrated for practitioners the importance of extending and supporting children's spontaneous play.

As children appear to make their own objectives out of the available resources we should take time to observe what they are doing and expand on that interest.

I focussed on wheeled toys in physical play because this activity was consistently popular. When I began this study our collection of wheeled toys consisted of four wooden trucks, a handful of second hand bikes and a tyre on wheels. During team discussions about how to spend our budget, we had expressed concern at spending money on wheeled toys which appeared to involve children in isolated play situations and seemed to be a constant cause of arguments between children. I observed the wheeled toys at the start and end of a number of sessions and each time the response was consistent - an initial rush for the wheeled toys followed by arguments about who got to them first. Once the bikes were occupied the children tended to cycle round the painted road track, although no one had told them to do this. My observations showed that the children were playing in groups of two, three and four. Very little verbal communication went on between the children but they seemed to communicate by actions and gesture, following each other round the track. Sometimes one child took the lead and sometimes another. At times pairs of children merged together to form a larger group involved in the same game. There was an equal mix of boys and girls using the wheeled toys although the boys were often first on the bikes. The girls tended to use the trucks which could be used by

two or three children at the same time. Games tended to follow a pattern of racing or chasing each other, stopping from time to time to rest or allow other groups to pass by or to speak to an adult. When questioned, children usually had a destination in mind such as the shops or a holiday. As mentioned earlier, the youngest three year olds used the bike as a means of moving around the play area observing the activities of others. The wheeled toy seemed to act as a secure base from where they could explore their new environment.

Following an analysis of these observations, our team was surprised that so much social interaction had taken place. It also became clear that the wheeled toys were the most consistently popular activity in the outdoor play area. Our outdoor area was built on a slope so it also involved good physical movement and effort to peddle the bikes up the hill. On the basis of this information we changed our plans and ordered a number of new trikes including step trikes with seats on the back. This gave us about fifteen wheeled toys in total. The wheeled toys continued to be in constant use but the type of play changed during the session. The boisterous personalities still tended to be first on the bikes but later in the session this group had moved on to other activities and children with a quieter nature tended to be using them. Both groups continued to communicate through actions and gesture more than speech. Close observation revealed the nature of the children's learning processes more clearly as the following example illustrates:

A group of boys were taking it in turns to say "ready steady go" and then race around the track. Oliver aged four was racing on a step bike, Jack aged three came up to Oliver to see if he could ride on the back. Oliver refused to allow him on. I questioned Oliver, thinking this was a social problem as Oliver was not prepared to share. Oliver responded that if he let Jack sit on the back he would not be able to win the race. Oliver had worked out that the extra weight would slow him down and give the other child an advantage.

This observation highlighted the ability of children to learn, through experience, key concepts that were not part of the planned objectives. It reinforced the importance of child initiated free play. We strived to balance the needs of the individual with the needs of the group, allowing time for spontaneous play along side planned activities. (see Fig 6.4)

PHYSICAL PLAY ACTIVITIES

OBSERVE
How children use the bikes.

REFLECT
This is the most popular outdoor activity children engage in co-operative play. 3 year-olds use it as a safe base to observe.

REFLECT
Wheeled toys are still the modt popular activity but very rare to see conflict now. More collaborative play has developed.

ACTION
Put resources into more wheeled toys.

OBSERVE
Less conflict over wheeled toys. Boys still go first but then they leave and the girls take over. More group games. More physical activity.

1

OBSERVE
Bikes are most popular activity. Children constantly want staff to get them out

ACTION
See Cycle 3.

REFLECT
Children need to be able to access bikes themselves without adult support.

REFLECT
The only bikes causing conflicts are the two-wheeler bikes with stabilizers.

ACTION
Have a very large shed for bikes and other physical activities but leave the cars out in a car park area.

OBSERVE
Children now get wheeled toys out for themselves. More choice and power for children.

2

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PHYSICAL PLAY ACTIVITIES

OBSERVE
Children attempt to ride two-wheeler bikes. They soon began to paddle their feet on the floor.

REFLECT
Removing stabilisers improved balance and co-ordination.

REFLECT
We observed how this Danish method was going to work.

OBSERVE
Soon pedals could be added and the children rode well.

ACTION
To create a BMX style track in the trees at the back of the nursery building.

3

Fig 6.4 Physical play activities

6.10 Implications for the practitioner

Despite the bad press which often goes with wheeled toys, practitioners need to remember that they are consistently the most popular activity chosen by children when outside and they are also a great way to exercise and to develop a sense of space, balance, position and co-ordination and an awareness of others, along with social interactions and negotiation skills. Therefore practitioners need to look at their outdoor space and decide how wheeled toys can be incorporated to make best use of their strengths while reducing historical problems such as domination by the biggest or strongest or toughest! We found that by adopting a Danish approach to learning to ride a bike, we were able to challenge all of our children and to develop the balance required for riding a two wheeled bike without becoming dependent on stabilisers. Practitioners also need to take time to observe children using wheeled toys in order to discover the child initiated learning which is taking place. We found that by providing a range of quality wheeled toys and by offering children the opportunity to select them from the shed themselves, we were able to address our initial problems related to children using wheeled toys outside.

Through the previous four action cycles, patterns of play emerged which could be linked to the development of schemas. This led to the fifth action cycle where patterns in play were analysed.

6. 11 Action Cycle 5

Patterns emerging in play situations linked to the development of schemas

In this section I look at the way children develop patterns in their play both in solitary and collaborative play. I link these patterns to the development of schemas and consider how to promote learning by supporting a child's schema. Such a lot of interactions happened between children in my observations, I struggled to find a manageable way of evaluating what was going on in terms of learning. It was at that point that the idea of linking an observation to a schema began to emerge as a sensible way of trying to unravel the activity.

5A Identifying a schema

Identifying a schema provides the window of opportunity a practitioner needs to know how to support a child and to maximise learning. I found the work of Chris Athey (1990 and 2007), who was strongly influenced by Froebel, particularly important in helping me understand the role of schemas. Athey states that there is no single definition of schema with which all would agree. My interpretation is that a schema is a repeated pattern of actions and that clusters of schemas develop into concepts. A schema is a pattern *of* action and a pattern *for* action. A pattern is a sequence of events in time and space and the schema offers a window into a child's learning by looking at these repeated patterns. A child's schema is self motivating and this in turn leads to good concentration on the part of the child, an important disposition for learning to take place. Each schema is like a piece of a jigsaw puzzle and different pieces when put together, make up a concept. This becomes a complete picture for the child in developing their understanding of the world. Children work at many different levels in their learning and by identifying a schema, a practitioner can begin to pinpoint what learning is taking place and what strategies the child is using to aid learning (Nutbrown 1996). For example when a child lays planks of wood into lines to represent a road, they are working at a symbolic level, the planks being symbolic of the road, but if the child is also articulating what they are doing and creating, this indicates the thought level is being demonstrated.

Beard described the chief characteristics of a schema as:

> "*organised wholes which are frequently repeated and which can be recognised easily among other diverse and varying behaviours."*
> (*Beard 1969 p3)*

A cluster of schemas then develop into concepts and can offer an insight into a child's stage of development:

> "*Schemas are just one lens through which children's development and learning can be viewed. Recognising and extending schemas or patterns of behaviour in young children, provides a framework which helps parents and staff plan an exciting and challenging learning environment to support children's development."* (Athey 2004 p12)

Some examples of common schemas are:

- *trajectory* - throwing /travelling / moving along a line - this can include running water, the length of a worm, crawling through a tunnel, rolling a ball; (See Illustrations 22 and 23)

- *enveloping* - covering up, such as hiding in a box or under a blanket; (See Illustration 24)

- *rotation* - turning, such as drawing circles, pushing a car round and round; (See Illustration 25)

- *transforming*, dressing up, taking on the part of Sleeping Beauty or Robin Hood or a wicked witch; (See Illustrations 26 and 27)

- *transporting* - moving objects from one place to another. (See Illustrations 28 and 29)

Appendix 13 provides a more comprehensive list of schemas and Appendix 14 gives further observational examples of schemas in action.

Illustration 22 Trajectory schema - moving water along a line of bridges

Illustration 23 Trajectory schema - moving cars down a ramp

Illustration 24 Enveloping schema - hiding in tyres

Illustration 25 Rotation schema - travelling in circles

Illustration 26 Transforming schema - Mummy Bear

Illustration 27 Transforming schema – Robin Hood

Illustration 28 Transporting schema – boys in trucks

Illustration 29 Transporting schema – boy with bag

Three main themes emerged from my observations in this research cycle and I discuss each in turn.

A1 *Using a schema to develop social interaction.*

A2 *Children exploring ideas in depth*

A3 *Cognitive leaps through social interactions*

A1 Using a schema to develop social interactions

Our team observed that some children used a particular schema as a vehicle to develop a skill which often linked to the development of social interactions, even though the schema may not have been directly related to social skills. For example it might be a transporting or trajectory schema but the outcomes supported social development. The following observation is an example of a child developing social interactions by using a schema as a vehicle to enable social skills to develop.

The builders and their transporting schema

Cam aged 3 was identified as having a transporting schema. He began by moving objects around the nursery setting from one place to another, the transporting of the objects was the main focus of the activity rather than what to do with them when he got there. Cam arrived at the nursery with excellent spoken language skills and reasoning skills but was poor at interacting with other children. He carried out his activities alongside the play activities of children he liked. A few weeks later Cam began to transport objects outside by taking tools from the top of the nursery garden to the bottom. He now talked about the activity as a building site and moved planks and bricks into the area. He also employed two younger children as his work mates, Thomas and Joseph and they called him "boss". He instructed them in what needed to be done to complete the task and they got on with the job. Each time the tools were available, the game was repeated. The play developed and once the planks and boxes were in place Cam instructed the boys to work on them with the tools. The end result had now extended into a task rather than just a transporting process. This activity had enabled Cam to develop his first friendship group with Thomas and Joseph. Thomas was very dedicated to the task, even when all the tools fell out of the bag half way down the nursery path he did not give up, instead he spent ten minutes putting them all back again before continuing to struggle down the path with his heavy load. However when it was time to tidy up the transporting schema did not seem so popular, there was no enthusiasm to move everything back up the garden! Clearly tidy up time was not child initiated which is why enthusiasm was so low!

We considered if Cam was passing on his schema to Thomas or if two boys with the same schema had come together through a common interest. I wondered if group activities were initiated because children working on the same schema were drawn together or if one child's schema motivated other children to develop the same learning pattern? Cam demonstrated how, through a schema, he was able to

develop a different set of skills which had a social focus and this enabled him to form his first friendship group. Maybe schemas have more than one role to play in child development. (see Illustration 30)

Illustration 30 A building site

Amy and the transforming schema

The first thing Amy did every day when she arrived at the nursery was to transform herself by putting on some dressing up clothes, usually a dress but sometimes just a hat. Once she was transformed she could move on to other activities which usually included the computer. Amy found it difficult to integrate into a friendship group and for her the computer was a familiar and safe place to be as she often played alone. She seemed happy in her own company and was equally tolerant of other children if they came to play. Eventually Amy's transforming became attached to stories told in the nursery including the Wizard of Oz, Rama and Sita, The Nutcracker and Snow White. Through role play she became integrated into friendship groups with other children who were equally keen to take on roles from the story. Amy's enthusiasm then encouraged other children to join the group and also extended the length of time the group continued to play out a story. Amy's transforming schema had given the

Amy followed three developmental levels of schema described by Athey at the Penn Green Conference in 2004, they were:

- *motor level - the child performs actions that do not appear to have representational significance;*
- *figurative representative level -the child uses actions, materials, marks to represent things or objects in the mind;*
- *verbal representative level - the child can give a verbal account of an experience without any concrete reminder of the original experience. This is the most advanced cognitive level.*

As practitioners we were able to extent Amy's learning by providing opportunities that were meaningful to her within her schematic interest. As (Athey 1990 p29) states:

> *"The diagnosis of schematic differences leads to differentiated and meaningful curriculum extensions"*

A2 Children exploring ideas in depth

Some observations took place over an extended period of time as an activity or game was revisited by the children over a number of days or even weeks. By analysing this extended play we were able to identify patterns of action emerging through the play activities which linked to social interactions between groups of children as in the following example:

Transporting schema and role play

For a number of weeks the nursery staff observed some interesting play in the home corner area. The home corner was set up as Jack's house from the story Jack and the Beanstalk and next to the house was a small story corner. A group of boys moved into Jack's house and began to move all the furniture out of the house and pile it up in the small story corner. They then played in the empty space with the few items that were left. At the same time a group of girls also began to move things from the house, mostly food, crockery, dolls and bedding. They then set up home on the other side of the nursery on a bench by the coats.

> *The same activity took place day after day but each day the two groups tried to get as much food as they could and raiding parties were sent from time to time from one group to another in search of more food. We then observed a similar type of play developing outside. The same group of boys used two large trucks and piled them up with all the gardening equipment such as spades, brushes, rakes, wheelbarrows, planks and bricks. The boys moved, as a group, around the nursery garden with their load. Meanwhile the group of girls took over the play house and continued their game. The children had taken their indoor play and adapted it to the outdoor situation so that it could continue to develop.*

In contrast to taking the indoor curriculum outside it is equally possible to bring outdoor activities indoors. We decided to see what would happen if the large planks and bricks were brought inside. The planks, boxes and bricks were brought inside for a week and the play observed.

> **Day 1** *AM and PM sessions all boys using the activity. Very loud and boisterous not much sign of structure to the play mostly moving things around from one place to another and back again.*
>
> **Day 2** *AM and PM sessions all boys using the activity. Not as loud as the previous day. The boys started the work together in exploring the materials in three ways, building high structures, building dens to sit in, building tracks to walk along.*
>
> **Day 3** *AM and PM sessions all boys using the activity. They began straight away to work together as a team building dens taking it in turns to take the lead. Two separate groups worked on different structures now called trains or aeroplanes or buses. Some girls were later invited to sit on the train etc.*
>
> **Day 4** *AM and PM sessions both started off with boys in the activity and then a group of girls arrived to play, bringing cushions with them from the story corner and began to make nest type dens. The boys gradually left the activity and the girls remained. When the boys left the activity they returned to the home corner and began to move the furniture.*
>
> **Day 5** *AM and PM session girls and boys played together from the start. Cushions arrived again and the group made some shelters and an area of tracks like the ones set up by staff on wet days under the nursery veranda. Other children came to walk along the tracks. The dens were used as a base for a super hero imaginative play game.*

These observations showed how play changed when children were given the opportunity to explore a situation in depth and have time to develop their own ideas. It is interesting to note that although the morning nursery children and the afternoon nursery children were separate groups, their play followed the same pattern, even the arrival of the girls came on the same day of the week and also included the introduction of cushions!

We wanted to see if the play continued to develop when we moved the boxes back outside. The outdoor play area was set up the following week to reflect the indoor play. We put out the planks and big bricks, set up the play house and left out the two trucks. No other wheeled toys were put out.

> *Ross, Brodie and Harry rushed out to get the trucks, they raced around the playground several times with the trucks at great speed. They then stopped to look for the things to put in the trucks. In the meantime Rose and Holly had found the planks and started to put a walking track together. The boys hovered at the edge of the track. Rose clearly knew what they wanted but she stood her ground and the boys left empty handed.*

From these observations we were able to observe the way play and social interactions developed in group play situations if children were given the opportunity to explore their ideas in depth. The involvement of other children seemed to have a spiralling effect on the play. This appeared to help the activity gather momentum and feed enthusiasm to the group for the activity to continue from day to day, developing and changing as the children become more confident to offer ideas. The pattern of play was passed on from one child to another so that the game could continue.

At the Penn Green conference (2004) Mary Jane Drummond was quoted as saying children should *"think for themselves and feel for others."* Developing schemas is all about getting children to think for themselves but how can practitioners cope with this in a setting where planning is done well in advance, objectives set at the start of the term and goals set before they enter the building. Profiles are meant to celebrate what children can achieve but by highlighting their successes on a set of pre set objectives it inevitably highlights what the child has not achieved at the same time. As discussed in Chapter Two, this relates to the purpose of early years education and the link to a 'conforming to society' social learning theory with its roots in the behaviourist approach. This position is opposed to the constructivist stance and I am convinced conflict between a behaviourist approach and a

constructivist approach is at the heart of much of the tension that has arisen between early years settings and the institutions which have the power to control them. The issue for practitioners is whether to continue to plan to pre-set objectives, as has been the case for the past ten years, or whether to revert back to a style of planning pre-dating the early years curriculum when objectives were matched to the learning outcomes of individuals. Using an action research cycle of observing, reflecting and taking action would be a better approach to maximising child's achievements and would be in line with matching objectives to existing learning. This would be a big shift in policy and planning from the pre-set objective based curriculum which has now become deeply rooted in our education system from start to finish. However there do seem to be signs of a shifting approach with the gradual introduction of individual learning programmes for children.

A3 Cognitive leaps through social interactions

I wondered if younger children made larger cognitive leaps if they worked with children whose schemas were more developed so we identified a group of girls who became very involved in role play following a story session. The most influential stories for them at the time were the Wizard of Oz and Snow White.

Role play stories

Sophie spent weeks dressed as Dorothy and her Mum had to put her hair in plaits before she came to nursery every day. Sophie's friend Myah dressed as the wicked witch putting on a black net dress every day as soon as she arrived. When the story focus changed from The Wizard of Oz to Snow White, Myah continued her role by being the wicked queen in Snow White. Sophie and Ellie dressed as Snow White everyday as soon as they arrived at nursery. These examples demonstrate a transforming schema. This group were all four year olds; they used their costumes to lead them into retelling the story, developing it to include more children and sitting at a table re-reading the books to themselves. Three year old Maisie and Eloise couldn't wait to put on the costumes - they felt a sense of achievement in wearing the clothes which the older girls prized. These three years olds did not wear them to re tell their favourite story, they wore them because they had observed the older girls valuing them. The older girls had a status and therefore their play materials also carried status. The same thing can happen outside with boys and bikes. Even though the younger girls had different reasons initially for wanting to wear the clothes, perhaps this initial interest was the starting point for a transforming schema to develop. Two years later we re-visited the story of the Wizard of Oz

because our Year 6 children were to perform it. Once again it sparked off a sustained period of role play for a group of children. Amy became Dorothy both at home and at nursery and Grandma had to make her a dress to wear at home which she then lived in. Elisa became Glenda the Good and the youngest member of the team was three year old Gabriele who was the Wicked Witch of the West. When Amy went on holiday Gabriele was quick to wear the Dorothy dress but as soon as Amy returned she reverted back to her wicked witch role even though she had a strong personality and liked to get her own way. There seemed to be an unspoken pecking order for the characters which the girls followed.

This role play was not just inspiring girls, Joshua formed a bond with the Tin Man, Alistair with the Lion and Timothy with the Scarecrow. Joshua played out his role in outdoor play by using fish boxes to build a stage. By doing this he had established a boundary for the story telling giving it a designated space. In contrast the girls flitted freely around the indoor and outdoor space to tell their story. The girls contributed to their story in an equal way with Amy keeping an eye on the overall structure to make sure they had not left anything out. Joshua on the other hand took complete control - he gave out characters, told them where to stand and monitored what they had to say. Milly was in her first week in nursery when she found herself in the role of Dorothy without a clue of the storyline but after a week with Josh she was hooked on the story and on role play, her confidence having grown in a week. In her second term in nursery Milly was initiating role play herself through the story of Goldilocks.

Joshua had led Milly into making a cognitive leap in social interactions through a role play activity. Milly is a good example of how a concept develops through a schema. She followed a transforming schema in her role as Dorothy and by developing and practising her role play she developed an understanding of the structure of a story, of empathy for a character, of performing in front of a group and eventually of being the leader and initiating role play with others. Once a schema had been applied a generalisation could be made and a concept established. This concept could then be repeated and applied to new situations. Experience is assimilated to cognitive structures and knowledge is secure. Milly could then take on roles from other stories in a similar way. Joshua had helped Milly by scaffolding her learning and had acted as the more knowledgeable other, pushing her within the upper level of her ZPD to develop skills for role play and story telling in front of an audience. Joshua was engaged in peer tutoring as described by Bruner. Not bad for a four year old!

> *"In fact it is out of this co-operative process of engaging in mutual activities with more expert others that the child becomes more knowledgeable."*
> (Vygotsky in Smith and Cowie 1988 p349)

These examples of schemas show how children take different forms of action to enable their own learning. From a research point of view I like the link between the need for action to take place to allow learning to happen and the need for action to take place to improve practice through action research. I must have been drawn towards action research for some reason and perhaps it is because it links so well to the way young children learn. Schemas help practitioners to understand what children are thinking.

6.12 The role of the practitioner

As practitioners in our setting we have become aware of an individual child's ability to make cognitive leaps by learning through more able others. This could help to explain how group schemas develop and why it is important to allow groups of children to work together at an activity over time. In Denmark, I observed children aged three, four, five and six working together - this age range was wider than I was used to observing and gave me a better insight into how younger children benefit from working with more developed older children. When I first began my teaching, it was the norm to have vertically grouped classes of four to seven year olds.

My observation of children transporting the home corner to a new destination demonstrates how a group of children could become involved in the same schema. My research led me to observe that when children became involved in each others' schema, a group schema emerged in the setting and this often developed through patterns of play and was handed on from one group of children to another. I could now link these patterns to schemas. I observed that if a child or group of children took responsibility for their own learning they needed time to explore ideas in depth otherwise children became de-motivated, frustrated and in the end abandoned the activity and turned to something less meaningful like chasing round the playground.

As a team, we found we needed to make a number of observations before we could confidently highlight a schema, as occasional actions or a passing interest was not a schema - there had to be patterns of repeated actions. An important consideration seemed to focus on the learning situation being initiated by the child.

We, as practitioners need to facilitate the excitement of the mind so that effective learning can take place. Each schema has a set of developmental stages that a child goes through on their learning journey.

The way in which a schema develops into knowledge is illustrated by the example of a baby's interaction with an object. When a baby first gazes at an object, if the object is moved the baby will still gaze at the space. The same applies to tracking. If a baby follows an object and the object stops the baby continues to track. The first accommodation occurs when the child realises that a static object can move and a moving object can stop. The schema therefore develops into more complex amalgamations and accommodations. An example of this was Charlie:

> *Charlie was sitting in a circle group and Olivia was counting how many children were in the circle by gently touching children on the head as she moved around the circle. When she got to Charlie she touched his head and said eleven, Charlie stood up and said "I'm three" Charlie was experiencing what it meant to be three years old and what it meant to sit in a position in a group.*

When these experiences allowed Charlie to understand that he could be the eleventh person in the group and at the same time be three years old, his known concept would have moved to a higher level and he would have developed new knowledge and new accommodations which were adjustments in his thinking. What is known becomes reinforced and expanded. Having established that schemas build into steps of learning that lead to knowledge which children can use to make sense of the world, and that between the ages of two and five years children begin to represent events symbolically, for example, using a building brick to represent a car, it becomes apparent that to give children meaningful experiences, such as how to operate as part of a group, is of a higher priority than handing them knowledge such as linking sounds to letters. To allow time to pour water down a drain pipe to see what happens seems more relevant than teaching punctuation. If experience has to come before knowledge, then children have been telling us this for a long time by developing schemas for themselves to gain their own knowledge. Children have been doing this even if practitioners have not planned for it. These experiences have been happening under our noses and all the evidence we need to show how children learn best is available to be observed. The question then becomes why do we continue to push for knowledge wrapped up in bits of artificially planned experiences? The experiences that children engage in, either because of us or despite of us, link to the dispositions for learning which gradually

throughout this research project identified themselves as being key factors to a child's success. These dispositions were discussed in Chapter Three.

6.13 Offering a broad and balanced curriculum – linking our experiences today to those of Froebel

The principle behind the 1988 Education Reform Act was that all children were entitled to a broad and balanced curriculum to be taken up by each pupil. Since then there have been sweeping changes to the curriculum and to teaching and learning in general and I would argue that these changes have undermined the principle underlying the Act. For the early years, the issue is more to do with the balance between child initiated, adult initiated and child supported activities. I believe the observations in this chapter highlight the importance of child initiated and child supported activities and demonstrate that the balance should be tipped in their favour. There is of course a place for adult led activities, but I feel in recent years too much emphasis has been placed on them at the expense of valuable child initiated learning opportunities. As Friedrich Froebel said:

> *"The children come to school in the morning full of ideas of what they are to do. Most of them have been awake since dawn planning their day. The question now is: are they to set their plans aside for a while to attend to the sort of work adults think necessary while they are fresh and untired; or shall they first attend to their own plans and later practise the skills necessary for a growing child?"* (Froebel in Lawrence 1969 p133)

As we can see, some issues are as contentious now as they were in Froebel's day. We are still engaged in the same debate although now it is called child initiated time and teacher initiated time. The language may have been brought up to date and the content of the teacher directed activity may have changed, but the conflict between what the child wanted to do, as a priority, compared to what the adult wanted the child to do, as a priority, remained the same. Adults usually win because they have the power to make the decisions. Children were often only offered time to choose after they had done their work - sometimes called 'having golden time' which has to be earned. Sometimes the child's choice gets left to a Friday afternoon. Child initiated activities become degraded and are given a lower priority to those of the adult led curriculum. The argument for this is often based

on adults belief that children concentrate better first thing in the morning or at the start of the week. If this were the case then children attending afternoon nursery sessions would never achieve as well as children attending morning sessions. Motivation must have more to do with the nature of the task or teaching style than the time of day. My observations of children in a Reception class demonstrated that children often tried to get through their work as quickly as possible to enable them to have more time to play. This gave the education process a sense of rushed urgency. Adults became tempted to keep children in a group situation for longer because they knew that as soon as they released them to engage in organised tasks, the children would not put in the same level of concentration, unless an adult was working with them to keep them focussed. Yet this same group of children could spend an entire Friday afternoon focussed on a self motivated construction task. I cannot remember the same distinctive divide between work and play dominating the classroom in the 1980's when an integrated day was in place. Today teachers feel pressure not to let children play, and it is as though free play is time wasted or not real learning. "What are their learning objectives?" a Reception teacher was asked when a group of four year olds went to do some free painting. How have we ended up with such a child unfriendly curriculum for our youngest children in primary education? Froebel found that:

> *"The question that anxious parents ask is, whether the school is justified in allowing the children to play like this in lesson time when important examinations loom ahead at 11, 12 and 13 years. Should not the children play at home and work in school, they ask? They do not consider sufficiently that the child who can play well can also work well; that the habits of work are formed in play, for then a child is directing himself; he sets himself a task and carries it through. There is or should be opportunity for richer and more stimulating play in school than at home."* (Froebel in Lawrence 1969 p135)

Here again we see the same issues are still being debated. Today it is the parents asking for more play and less focus on the exams at years two and six. It is the government, OFSTED, advisors, head teachers and practitioners coming into the early years for the first time, who need to be educated about the value of play. The very nature of play in the nursery or school environment makes the process active and social. I love the description from Froebel that the child who can play well can also work well.

In my setting we have strived to offer play situations which would inspire children and in the past we often felt concerned that, as practitioners, we were not able to make the same professional contributions that we were able to make through indoor play. Sometimes in the past it felt like a policing situation outside, ensuring safety, sorting out disagreements, giving words of encouragement and giving out instructions. After reading my thoughts on outdoor play made in the early stages of this study, I was surprised to note how much my attitude has changed. The key changes we have made to our outdoor play situation as part of the action research process have included:

- *developing the nursery garden;*
- *providing more time for free flow, indoor and outdoor play;*
- *offering children more choice by operating an open access system to the sheds;*
- *introducing a forest school approach;*
- *developing the school grounds and extending aspects of outdoor education to the whole school.*

The result of these changes means we do more supporting of children's own interests in play activities. The introduction of the forest school approach has been a major part of the journey to inspire children and to offer them the best opportunities for learning through a broad and balanced curriculum. At the start of this chapter I identified five mini cycles of action research and one major cycle which was the development of the journey from sensory garden to forest school. I have discussed the five mini cycles so I now focus on the major cycle.

6.14 Major research cycle - from sensory garden to forest school

After working through the above action research cycles a deepening understanding of children's interactions in the outdoor environment developed. The next step was to extend the environment available by using the wider school grounds. The process followed the action research cycles of observation, action and reflection. The cycles began with the small scale project of creating a sensory garden. (see Illustration 31) Children were observed using the garden and the observations showed how children used their own ideas to create exciting games and activities such as:

- taking small diggers and trucks on to the path to create a building site;
- making potions in the bird bath;

- smelling herbs;

- trimming shrubs with scissors (giving them a hair cut!);

- collecting worms and observing them (practitioners did put them back in the soil at the end of the session when they were found hanging from a bush!);

- weeding, watering, planting and mulching;

- reading books on a bench under a tree;

- setting up a picnic;

- making a den;

- hiding in the willow tunnel;

- watching butterflies on a buddleia;

- drawing pictures of the flowers;

- pretending the cherry blossom was snow.

Illustration 31 Establishing our sensory garden

This sensory garden area was always in use so it became a natural process to look for similar opportunities on a larger scale. As a team, we had appreciated for many years the forest school approach adopted by the Scandinavian system. We did not

have a forest but we did have extensive school grounds and it seemed manageable to bring the two together and offer a forest school approach. The forest school initiative took time to implement as we needed to research the philosophy and fundraise to purchase appropriate all-weather clothing. We also created a handbook which addressed risk assessment and outlined the philosophy and organisational issues. We introduced the concept to parents and gained their full support. Eventually at the start of the Summer Term 2006 we were ready to begin our first forest school within our school grounds.

6.15 Description of a forest school session

A traditional forest school session would involve a walk through a woodland area exploring the habitat as it changed along the way, resting at different points to engage in explorations of the environment. We adapted the approach to work within our school grounds visiting different parts of the school grounds during the session. Forest school happens on a Friday and one of the most important principles is that we go out whatever the weather. Children go out with their key worker which gives a group of no more than thirteen children at any one time. We also tried to ensure at least one other adult who was usually a student or a parent. Later we introduced a rota for Year Six children to join us as well. They act as role models and additional helpers and this has proved very successful as they rise to the responsibility. We notify parents in advance that it is their child's turn for forest school and give parents the option to join us. Children arrive at their usual time and begin with a trip to the toilet, then get into their waterproof clothing, boots and any other accessories, depending on the weather. They then spend the rest of that session outside but return to the nursery in time for hot chocolate and toast before going home. Once outside, the session focuses on a balance of the activities relating to the following three areas:

- the weather and the season;
- child initiated ideas;
- suggestions from practitioners, often linked to activities we had been engaged in during the week, such as a story.

Typical activities include:

- climbing over the tyre trail;
- playing games in the outdoor classroom which involved listening and following instructions;
- playing physical games on the field;
- playing hide and seek in the trees;

- den building;
- story telling - The Three Little Pigs is a constant favourite;
- sitting in a log circle and listening for the sounds around us or singing favourite songs and rhymes;
- bug hunting;
- walking through a woodland trail;
- rolling down the hill;
- lying on backs watching the clouds go by;
- climbing the one suitable tree;
- kite flying;
- exploring mud;
- jumping in puddles;
- catching blossom falling from the tree;
- observing the views from the top of the field;
- making sea-saws out of logs;
- making nests out of cut grass then using them for games;
- making things out of sticks and string;
- feeding the birds;
- planting trees and bulbs;
- listening to the sound of the wind in the trees;
- watching rain fall in puddles;
- catching shadows;
- feeling the frost on branches;
- observing a spiders web turned to ice;
- finding items hidden in the trees;
- going on a bear hunt;
- going on safari;
- collecting things we liked to touch, smell and observe;
- engaging in role play such as, using logs to make a pirate ship.

Illustration 32   Our forest school - heading up the field

Illustration 33 Our forest school – singing songs

Illustration 34 Our forest school – tree climbing

Illustration 35 Our forest school – bug hunting

Illustration 36 Our forest school - splashing in puddles

Illustration 37 Our forest school - counting

Illustration 38 Our forest school - climbing

We found that children quickly settled into their forest school session and looked forward to their turn. The children do not mind the weather as long as we wrap them up well and they remain warm and dry inside their clothing. We found, through our observations, that children successfully developed dispositions for learning, as discussed in Chapter Three, through their forest school experience.

6.16 Linking the forest school session to previous research cycles

Our experience of offering a forest school approach led us to identify ways in which it supported the themes highlighted earlier in this chapter. The following examples show how our observations linked to the five themes.

1. Communication and the development of cognitive structures in the outdoor environment.

This observation highlights a child communicating through gestures and sounds as a method of developing his thought processes:

Finley and the frog story

Finley, aged three, was listening to a story about a frog who was not well and needed the children to help him find the right conditions to make him better. If they brought him the right thing, such as a slug to eat, it made him croak and jump. If they brought him the wrong thing, such as a nest to live in, he did not move. Finley had poor concentration in the indoor setting and was often found lying under a table or distracting other children at story time. Listening to this story outside in the log circle, Finley was totally engaged. He did not speak, but every time words were spoken that could be accompanied by actions, Finley jumped up and carried out the action around the circle. Therefore when the frog jumped and croaked, Finley jumped and croaked. Finley had been able to use non verbal communication to develop his concentration and listening skills as well as his enjoyment for stories.

Speech and other ways of communicating are important facilitators in this learning process. Finley was sharing his knowledge with others by communicating in gesture, showing that he knew what the story and the meaning of the language was all about. As mentioned earlier, Piaget believed that knowledge began when it was communicable and controllable. When young children have been exposed to a number of experiences they can then imagine that experience without being there. Finley was engaged in symbolic representation because he knew what a jumping frog looked like. He had seen one in the nursery garden and he had the image stored in his knowledge bank. The forest school environment gave Finley lots of opportunities to become secure in the concept of using actions to represent words by offering him a range of practical experiences and opportunities to communicate in different ways.

2. Children learning through observing other children

This observation highlights the way a child learned through observation and then imitated what was observed:

Corrigan and the logs

Corrigan, aged three, was working in the wooded area of the school field. A large pile of logs had been delivered and the children were busy in small groups using the logs to build a range of structures. Gabriele and Hannah were making a den between two trees. Harry, Lewis and Steve were making a crocodile swamp. Jasmine and Christopher were helping two Year 6 girls make a house and Finley was making a see-saw. Corrigan wandered from one group to another standing on the edge watching what they were doing. He was offered the opportunity to join with several groups but declined. He continued to observe. Several weeks later Corrigan was given the same opportunity to use the log pile. This time he began working with Harry to make a ship and they worked as a team lifting the heavy logs together and discussing where to place them.

Children learn by imitation and they need to be given time to practise, and when they are developmentally ready they should be able to imitate the play they have observed. Corrigan was given the time to stand and observe and was learning from more able others. The activity was within Corrigan's ZPD so he was able to join in with the activity a few weeks later.

3. Offering choice in outdoor play

The outcome of allowing children to make choices is seen in the development of thinking skills and problem solving (Garrick 2004), the relationship between thought and action. The following observation gives an example of two children making decisions:

Making homes for small creatures

Following a story about some animals who had lost their home when a tree blew down, the children were given some toy woodland animals. It was suggested that some of the group may like to make new homes for the animals. Helena aged four, found a ledge in a tree and managed to balance her animal on the ledge then covered it with leaves to keep it warm. Jess aged four, made a wigwam construction out of small sticks. He became frustrated when the sticks kept breaking as he tried to push them into the ground. He then found some bigger, stronger sticks but he still could not get them into the ground. He looked around

> *and found a pile of log chippings; the sticks pushed easily into this material and he was able to continue with the structure. In the meantime Helena had been busy finding food for her creature and exploring ways to make a second room in which to store the food.*

It is the relationship between thought and action which helps children to make cognitive leaps in their understanding.

4. Children's use of physical play activities.
We found that by adopting a Danish approach to learning to ride a bike, we were able to challenge children and to develop the balance required for riding a two wheeled bike without becoming dependent on stabilisers. An example of this was Cameron:

Cameron and the two wheeler bike

> *We created a BMX style track on part of the school field following our visit to a Danish forest school. We then took the pedals and stabilizers off of the small bikes. At first children got on the bikes expecting to be able to ride them and they fell straight off. Cameron was determined to have a go and he used his feet to paddle along the floor. When he got to the downward slope he naturally lifted his feet to roll down the hill. He had developed the balance to ride a two wheeler bike without having to think about it.*

Children loved the sense of achievement when they managed the bike for the first time. They also liked the challenge of trying to ride it by going back to the activity over and over again until they mastered the skill.

5. Patterns emerging in play situations linked to the development of schemas
Children needed time to take action and for those actions to become part of their thought processes allowing their new knowledge to become stable. We identified these actions as schemas and the forest school experience provided a wealth of opportunities to observe these patterns in play. An example of a child initiated schema was Josh:

Josh and role play

> *Josh had a transforming schema so at every opportunity he transformed himself into a character from a story. As soon as the group arrived in the woodland area he became a character from a story and asked if others could help to act it out. He began as the Tin Man from the Wizard of Oz, then became the wolf in the Three Little Pigs. One of his favourite characters was Robin Hood and another favourite was the giant in Jack and the Bean Stalk. Josh's enthusiasm drew other children to the story and Josh began to use his spoken language skills to organise characters, set the scene, sequence the story and offer advice on what to say. He was careful not to miss anything out and he got frustrated with other children if they did not follow his lead. Josh inspired others to enter his world and transform into someone else.*

An important consideration seemed to focus on the learning situation being initiated by the child. The forest school approach lent itself to child initiated activities based in a highly motivating environment. At forest school, the experiences our children engaged in, became linked to the dispositions for learning which gradually, throughout this research project, identified themselves as being key factors to a child's success.

6.17 Tensions that exist within the early years sector in relation to theory and practice

Having amassed such a vast collection of observations and having drawn conclusions based on their outcomes for implementing change, we then had to negotiate a balance between what we felt was the right thing to do for our children, with the existing curriculum requirements. As discussed previously, early years settings often find themselves being pulled in more than one direction. They have to stretch like a piece of elastic to try and accommodate all the different interest groups and requirements. The development of cycles of action research in this study had to operate within this wider political context. It would have been impossible to interpret the action research experience without reference to the constraints and tensions which were ever present in the setting. Different people would come into a setting with different agendas for "good practice" which creates tension and would often leave practitioners treading the middle ground to keep everyone a little bit happy.

Fig 6.5 Different variables impacting on our early years setting

It is impossible to isolate the self empowered action research process from these pressures (see Fig 6.5). The Ofsted experience highlights the tensions - ideally schools need children to arrive slightly below the national average (what ever that may be) and then be fed into the system with the best chance of achieving good SATs results in order to keep or improve their position in the league table, showing good value added progress. This is the key to a good Ofsted inspection, but is not a measure of best practice for our youngest children. When our setting was inspected in 2007, it took three men the best part of a day to debate whether children were coming into our setting as average or slightly below average in their spoken language. In practical terms the difference was minimal but it made all the difference to the schools 'value added' results. It was disheartening when there were so many other exciting achievements happening in our setting which went unvalued. This is not a climate conducive to practitioner research and under these conditions I did sometimes have to work hard to keep my motivation to carry on, when often we were told to do things which I knew were not in the best interests of our children. Another example of the tensions influencing the research was when people suggested we should teach children in the outdoor environment in a structured formal way. I knew from my observations that children became deeply absorbed in their learning when they were allowed to follow their own interests. The skill for the practitioner lay in the way an adult supported the play and helped

it to develop. This may simply mean adding a piece of equipment or expanding on the conversation to provoke new thoughts and ideas. It was disappointing to note that when our local school inspector came to visit our setting in 2006, she was able to write a report without actually looking at or talking to a child. On this occasion all that mattered was the visual environment and the paperwork. We, the practitioners, have to satisfy the inspectors and at the same time try to preserve some self esteem and professional judgement in making the best decisions for the children we teach. As a practitioner researcher, my findings suggested that we were not delivering best practice because of the constraints acting upon us. This type of discovery leaves the researcher with a dilemma, as discussed in Chapter Five, how to balance curriculum requirements with the outcomes of the research process. (see Fig 6.6 and observation below)

CYCLE OF PRESSURE IN FOUNDATION STAGE

Stylised teaching leads to a lack of imagination / insecurity in own ability to make decisions / lack of confidence / loss of individuality / limited creative thinking.

Numeracy and literacy strategy has pushed teachers in a stylised teaching (everyone the same) leading to a feeling of hands being tied behind backs. Fear of OFSTED if they break from the mould.

FOUNDATION STAGE WHICH WAY TO GO?

Teach to feed into the system. Prepare for the teaching style of the literacy and numeracy strategy. Go against the majority of European countries. Not led by child development, led by pressure from SATS and league tables.

Teach to meet the individual needs of the child. Use methods appropriate for the age and stage of the child. In line with most of Europe. Led by understanding of child development. Play based, holistic approach to learning.
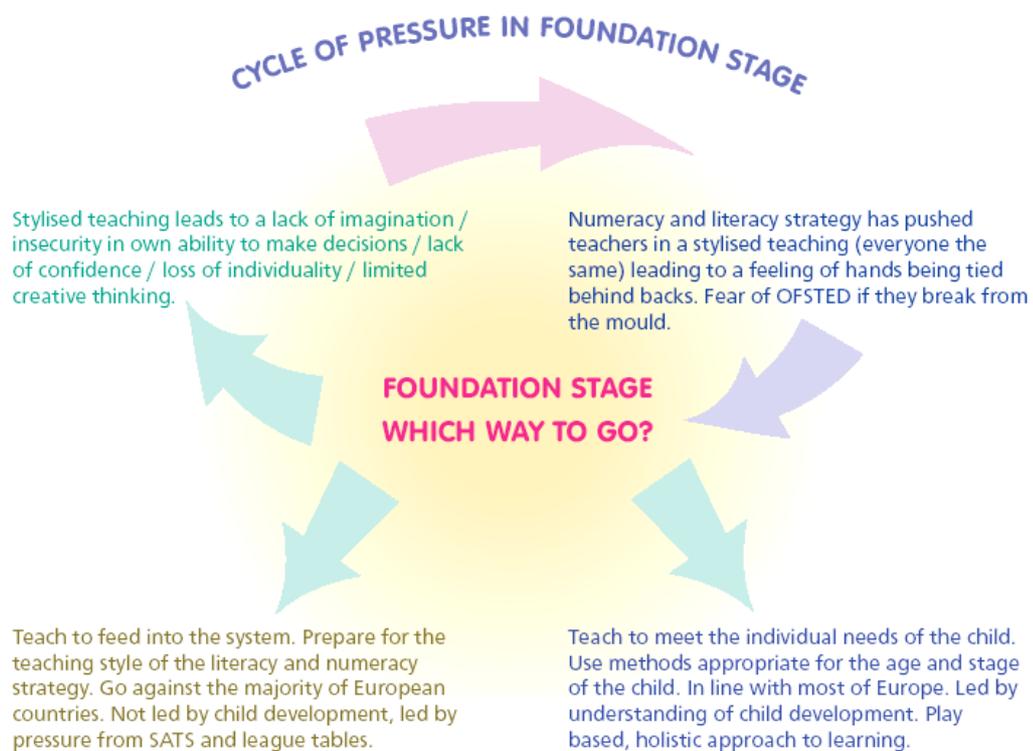
Fig 6.6 Cycle of pressure

6.18 Observation - an example of conflict between the research evidence and the curriculum constraints

In May 2006 at the side of our nursery building was a ramshackle bunch of plant pots and seed trays. We were growing a collection of tomatoes, leeks, marrows, beans, assorted flowers and some trays of grass which were going to get a hair cut from the children at a later date. Every day Joshua and Joseph collected a watering can to water these plants. When we lifted up a seed tray we found a family of snails had taken up residence on the side - no wonder the beans were looking a bit ropey. Lauren was fascinated by snails and was soon on the scene to move them into our compost bin to join the established family of snails which lived there all year round; she checked on the compost snails every day. We lifted up a pot of soil which was full of old grass and weeds and discovered that inside we had an ants' nest. Joseph, Joshua and Sarah sat on the grass and watched as the ants frantically moved their grubs out of sight to the earth below. We watched as they struggled to carry something almost as big as themselves down the side of the pot. We observed the tunnels they had made in the soil to move around their home. Our attention then returned to the grass trays. Joshua lifted one up and there was a scurry of black shiny beetles rushing around to find a new dark spot. We tried to count them but they were too fast so we talked about why they might be in such a hurry to hide. Something moved behind the tray and made everyone jump. We lifted the tray and a small frog hopped onto the grass. We observed his long powerful back legs as he jumped into the shade by our nursery building. We had a discussion about why he had chosen to live in our nursery garden. Lauren thought it must be because we were so good at growing snails; she knew that frogs liked snails for tea. Joseph spotted a tiny ladybird where the seed tray had been and we stared hard to count the spots. One seed tray had no plants in, only a bit of old dry soil but when we moved the soil we found a family of beetles, not black and shiny this time, but brown and bumpy so we compared the difference between the two types. Emilia arrived to show us the tiniest snail she has ever seen. She found it under a log in the sensory garden and was carrying it in her hand like a precious gem. We discussed whether to put it in the compost bin with the others or back in the sensory garden and the group concluded it should go back in the garden with its family. We put the seed trays back, the time had flown and it was time to tidy up. (May 2006)

This observation is an example of child initiated and child supported activities. The outcomes for the children can be linked to the following Early Learning Goals (see Appendix 4a Numbered ELG's):

- PSED dispositions and attitudes: 1 / 6 / 8
- Communication, language and literacy - language for communication and thinking: 3 / 6 / 7
- Mathematics - shape, space and measure: 5 / 8
- Knowledge and understanding of the world: 1 / 3 / 4 / 5

As a team of practitioners we put a high value on this type of experience believing it is a powerful way for children to learn. However not everyone saw this area as an opportunity for learning. In June 2006, we had a visit from a local school inspector and as a result of her visit our plant pot area had to go as it was considered scruffy and gave a bad impression. We were told that Ofsted would not like it and they would enter the nursery with a negative impression of our setting. If the observed activity had been seen, I would probably have been told it was ad hoc, and the lack of a pre-planned learning objective would be questioned. I would be asked which children were to be targeted and how the activity was going to be assessed and evaluated, as this earlier example from a senior management observation indicates:

> *"The TA in the nursery was working with a very small group of children with the planting area. Was this planned deployment, and if so, what was the assessment focus?"* (11.6.2004)

The inspectors feedback included comments on our plant pot area:

> **"***The environmental area of the nursery is chaotic: it has become a "wilderness" rather than a learning resource. The area is untidy and does not present a positive model for children to emulate. (It is worth noting also that it is likely that any visitor, or, indeed, a visiting inspection team, will form negative pre-judgements about provision prior to entering the building and observing."* (Hunter-Wallace & Leafe 16.6.2006)

Following this report our garden was ripped up, plants lost and children had no secret places to hide. The sensory garden was made smaller and more of the area was covered in stones to keep it looking neat and tidy. The path remained but much of the established planting had to be replaced costing hundreds of pounds and taking twelve months to re-establish. The wildlife in the above observation was all removed. Our garden had been sterilised. The inspector's use of the word "wilderness" to denote a negative feature, is ironic! Our team like the idea of

children experiencing some wilderness. After all wild life needs wild places to live! Tidying this away reinforces the conditions for 'nature deficit' (Louv 2005). This observation highlights the tension which exists between the professional judgement of practitioners and the system in which they have to perform:

> *"When children have been playing industriously outside, to the visitor it can simply look chaotic and a mess! Naturally staff want indoors and outdoors to look aesthetically pleasing. However, it is important not to equate aesthetically pleasing with stimulating. What is aesthetically pleasing to us may not be of much use to young children."*
> *(Bilton 2002 p44)*

Mitchell aged four looked at the 'new improved garden' and said "*This used to be a lovely garden didn't it. Did you want to change it?"* This was a hard question to answer.

Incidents like the one described above illustrate a lack of respect for the professional status of practitioners. (see Appendix 12) The negative wording in this report would not be used in a progress report of a child or a student yet experienced highly trained professional people are expected to accept it without right of reply. This example demonstrates a lack of respect for the workforce by the people sent in to inspect it. I find this interesting because respect is a word that continued to crop up throughout my study as a powerful tool in achieving a positive learning environment. Thankfully there is evidence that the tide is beginning to turn and words like professional judgement, needs of the individual and freedom to adapt the curriculum are starting to be used.

6.19 Summary

Work in this chapter has related to my first theme - *Children's learning.* The development of this theme has led me to a better understanding of the impact of learning dispositions on children's outcomes through observation, action and reflection. I have considered the importance of schemas in the learning process, linking them to my observations. This chapter has also related to my second theme- *the impact of national policy.* This work included the value of being a practitioner researcher. I have found that by simply being involved in the research process, enabled all the practitioners in our setting to be more aware of how children learn outside and how to support that learning. Therefore the research process enabled good practice to develop over a period of time. This highlights the

importance for practitioner research being incorporated into continued professional development. Finding out how children learn by turning to experts in the field and by looking at our own children, had led our team to a better level of understanding about the nature of knowledge and different learning styles. Knowledge seemed to appear in my research at two levels:

- how children learn and acquire knowledge;
- how I can interpret children's learning thus creating new knowledge which then develops my own practice and influences the practice of others.

As McNiff, Lomax and Whitehead reflect:

> *"The social intent of your research was to improve your particular situation. The improvement would have happened because you, and probably other people, improved your understanding of what you were doing. You were working collaboratively, so you were clarifying to each other what this meant for you and your work. You were negotiating and constructing your own meanings out of your shared practices. In this way you were advancing your individual and collective knowledge."*
> (1996 p106)

The threads which emerged strongly in the research and which came through the cycles of action research have related to:

- communication and action;
- the physical environment;
- choice and empowerment;
- political intervention in early childhood education.

Outdoor education emerged as being a powerful facilitator for these three to develop. Policies need to allow practitioners to maximise the opportunities for the type of learning that the outdoor environment can clearly offer. The EYFS offers hope for the future as it offers practitioners more flexibility and opportunity to make decisions about their settings.

The outcome of developing a forest school approach had led to the gradual development of outdoor learning in other parts of our school. It has also led to a link with our local secondary school through the development of a woodland space

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on their site. We have helped to establish a forest school cluster group to disseminate good practice and encourage others to expand outdoor learning across the county. Our links with Nottingham Trent University have given teacher training students the opportunity to experience a forest school in action. From our small acorn, the development of the sensory garden, a much larger tree has begun to grow.

Chapter Seven
Conclusions and Reflections

In this chapter I draw together my final reflections and recommendations based on the discussions in the previous chapters. I evaluate what has been learnt and draw out the key issues which have emerged. My main aim has been to develop effective practice in the provision of outdoor education in the early years and I have to draw conclusions about the nature of this practice, based on what I have found out during the course of this study. In this conclusion I consider the key features of a good early years setting in terms of outdoor education and how it could be organised, based on the principles I have advocated. In reflecting on and asking myself 'what is my new knowledge?' My first response was ...... nothing new! Everything had been done before! I had delved back into the past and discovered how our practice today is still influenced and should still be influenced by many different pioneers of early years' education both in terms of using the outdoor environment and in terms of best practice for teaching and learning. However, although it may have been done before, it has not been done with my children in my setting. Each setting is unique because the people in it are unique and each generation experiences a different life style. Each setting has different opportunities for outdoor education and each day the outdoor environment is different depending on the time of year, the weather, the people involved and the resources available. I think this highlights the uniqueness of each setting and therefore shows the importance for practitioners in taking time to reflect on how they develop outdoor education for their own group of children. However, having highlighted the uniqueness of each venture into the outdoor space, I also believe there are common threads in establishing effective practice in outdoor education and I attempt to draw them out in this chapter.

It is not in our interests to re-invent the wheel so we should be grateful to learn from those who have gone before us. Often it is the people who are new, not the ideas, but we often fail to learn from the past or from the experiences of other countries. Each generation seems to need to discover things again for themselves. I have learned from many people who, in the past, devoted their lives to early years' education. In my quest for new knowledge I feel grateful and privileged to be able to learn from the work of others like Margaret McMillan. There are many directions this research could have taken which has left openings for possible research in the future. For example:

- I have only touched on the physical benefits of outdoor education. In our country we have significant problems with childhood obesity caused by lack of exercise and poor diet. Physical well being links strongly to these issues and to brain development, boys and gender issues and to the forest school approach and growing food in schools;
- I have limited the age group I have studied and I am aware that in the school setting children are in the Foundation Stage until the end of the school year in which they are five. I have not studied the impact of outdoor education on these Reception children although I believe the issues raised in this study are equally important to them;
  there are implications for teacher training and for the way we train other early years' practitioners which I am aware of but I have not addressed directly in this piece of work. An appropriate form of training could be based on the Scandinavian pedagogue model which is equal in status and qualifications to the teacher but different in approach. This would enable early years' practitioners to facilitate learning and nurture the individual.
- gender issues have not been explored in detail.

These are all important issues which I acknowledge I have not had time to consider in depth. There is also much I have read which I have not had the space to include in this study although this reading has still impacted on my thinking. I have therefore been selective in choosing the information which I feel best reflects my thoughts and experiences.

In my introduction to this study I said that some people are thought to learn best when given the whole picture to break down into smaller parts. Other people learn better when given small parts to put together into a whole picture. I proposed that my study was best seen as a whole picture which would be carefully taken apart to see what was happening inside and that by the end I hoped all the pieces of the puzzle would be put back together and the picture would become clear.
Having dissected all the elements in the previous chapters I turn my thoughts to the whole picture, *focussing on my initial research question of developing good practice in the provision of outdoor education in the early years.*
I approach this with a feeling of Utopia as I describe a setting prepared to truly meet the needs of children aged three and four years through an outdoor learning experience. My thoughts have been influenced by my own learning journey through this piece of research and I have come to understand the real value of allowing children to use the outdoor environment as a learning base. Our setting has been

through a process of evolution rather than revolution as we have taken small steps towards our goal of making better use of our nursery garden and then moving beyond the garden to establish a forest school approach. There emerged three main pieces to this puzzle which have been tracked throughout this study and they relate to outcomes of the main themes I described in the introduction.

7.1 Organisation of this chapter

Through developing good practice in the provision of outdoor education in the early years I have organised my conclusions under the following headings:

- implications relating to my first theme;
- implications relating to my second theme;
- implications relating to my third theme;
- being an insider researcher;
- disseminating findings;
- final reflections.

In line with most aspects of this study, nothing fits neatly into separate boxes so inevitably aspects of each section overlap or are equally relevant to other sections. I have therefore attempted to put things where I felt they had the strongest implications. Within each theme I refer to the implications for the child and implications for the practitioner.

7.2 Implications relating to my first theme

Theme 1 - Children's learning - *the impact of learning dispositions for children's outcomes relating to the theory and the practice of how children learn.*
This theme encompassed the following areas:

- child development;
- how children learn;
- thinking skills and schemas;
- learning styles and children as partners;
- gender issues;
- the use of observation.

In an ideal setting I would put the dispositions, which underpin the traditional curriculum, at the heart of all learning experiences. These dispositions are

attitudes, values, skills and concepts connected with being a successful learner. They are acquired through experiencing nature, problem solving, risk taking, collaborating, creating, investigating, exercising, having first hand and multi-sensory experiences and gaining a positive self image. They are encouraged through the provision of opportunities to concentrate for a sustained period of time, to work with others, to communicate thoughts and ideas, to form friendships, to listen and respond, to solve problems, to follow instructions, to develop ideas, to manipulate and control their own body, both in large and small motor skills, to observe and be motivated and interested in the world around them. A child lacking a firm foundation in these attributes is likely to be less able to access the school curriculum than a child who possesses them.

To enable these dispositions to develop I would incorporate a regular session based on the ethos of the forest school approach. This would be a regular experience for every child because I have learnt that it makes healthier, fitter, happier more motivated children who are more able to access the school system because they have developed dispositions which are vital for effective learning. I would suggest that without these dispositions a child may not grow into a life long learner. I emphasise the phrase *forest school approach* because, as we have demonstrated, it is not necessary to have a forest and any outdoor space can be used to reflect this sustained and regular approach of working in the outdoor environment. My definition of the forest school approach is a flexible definition but I am aware that some people have a specific definition which would for example incorporate the use of fire and tools. I would not advocate the forest school approach as the only vehicle for learning because I also value the other opportunities we offer our children and I understand there needs to be a balance. For example, children need to be inspired by traditional stories, to engage in role play, to develop a love of books, to be creative with art, dance and music and to become absorbed in different cultural experiences. These were the things I found lacking in my Danish forest school experience. It could be possible for our children to have the best of both worlds by mixing indoor and outdoor opportunities with a creative and culturally rich environment which has language / communication at the centre of their experiences and a physical, multi sensory, fresh air approach, following their individual interests through outdoor experiences.

7.2a Implications for the child

My research has confirmed a view that a 'top down' approach is not the best way for young children to learn. The constructivist, 'bottom up', learn through

experience approach gives children the best chance to maximise their learning. This is the message my children gave me through the observations undertaken in my setting. Children tell us what it is they need to learn at any given time if only we take the opportunity to observe and to listen. Children meet their own objectives in outdoor play, sometimes *despite* adult intervention rather than *because* of what adults have planned. Children demonstrate the need to develop their own ideas through their schemas. The outdoor environment encourages children to develop positive attitudes and to develop good behaviour. It also provides ideal conditions for children to develop dispositions which underpin all future learning potential. A theme which has developed over time in our practice has been to empower children. This has not always been easy to strive for because pressures from outside have often worked against children having power. Without this power to make choices children will not be in a position to control their learning. We have attempted to build opportunities into our session for children to be in control of their learning and also to make decisions which affect themselves and others. The need to empower children in this way is supported by other research referred to earlier in Chapter Four (Pascall 1999). I would advocate providing children with the opportunity to make their own choices in outdoor play and this research has enabled us to develop strategies for doing this effectively.

7.2b Implications for the practitioner

Throughout this research I have been strongly influenced by constructivist learning theory and this has had an impact on my view of how early years' practitioners develop their practice. I discovered that there is never a simple answer to my questions and never any consensus of opinion on the outcomes of research. I have learned through the course of this study that there is a wide range of opinions, beliefs and theories about best practice and practitioners need to consider all available evidence and then come to the conclusions that fit best with their own beliefs and experiences. I take a constructivist view of learning because I firmly believe that children should be given the opportunity to build their own knowledge and understanding through practical experiences and one of the best places to do that is in the outdoor environment. I have discovered that in order for children to gain knowledge, and by knowledge I mean a deep understanding of ideas and concepts, there has to be a meaningful context. This context is not just an intellectual one, discovered through books, computers, white board instruction or discussion, but is provided by the world around us which has an impact on what we do, what we understand and what motivates us to know more. My research has deepened my understanding of how vital a meaningful context is to the

development of a new concept. A concept is made up of a complex web of previous understandings and new first hand experiences. Therefore the environment in which we learn becomes a key factor in the way understandings and skills develop.

Practitioners need to be aware that children learn to move and move to learn. An example of children needing to move to learn can be related to the concept of the hand and brain needing to develop together in order to achieve maximum learning. This has been a long standing feature of practice in the early years but as children get older, the brain is expected to dominate and practical opportunities decrease. The outdoor environment can maintain these hand and brain opportunities and therefore maximise learning opportunities for longer. Activity, supported by language, enables children to internalise their new knowledge enabling new thought processes to develop and move on to a new stage in learning. This lies at the heart of the constructivist approach including the development of schemas. Schemas provide a practitioner with a window into the child's thinking and stage of development. My research has highlighted the importance of recognising and supporting schemas to enable children to move on in their thinking. Observation is the key to identifying a schema and practitioners need to use their knowledge of the child combined with their knowledge of child development to enable them to make the most appropriate decisions.

Language development is one of the key factors in being a successful learner and practitioners need to be aware that the way some children interact in the school setting in terms of language, may not be a true reflection of their linguistic ability as demonstrated at home. The Tizard and Hughes study (1982) highlighted the impact a stressful situation could have on a child's ability to utilise their language skills. Poor language skills in the classroom might also be a sign of stress due to the unfamiliar situation in which a children find themselves. If stress, as discussed in Chapter One, prevents the brain from making effective connections, this is a double barrier for some children to maximise their ability to achieve. It is a bonus for the children who are comfortable in this type of learning environment. The EPPE report identified the importance of the quality of adult-child verbal interactions. This confirmed the conclusions reached by the Tizard and Hughes research study.

In considering my own learning and the knowledge I gained as a researcher, I realise that I have gone through exactly the same process as the children I had observed. I made better progress because I was working in a social context where others respected, supported and moved my thinking on (Vygotsky 1962). My

learning had been well scaffolded, as Bruner would suggest, by the support I received from Nottingham Trent University and through my reading. I needed a meaningful context to make sense of what was going on and so my setting became the focus of my study. I asked lots of questions, using language to support my thinking and I made changes to test out new hypotheses. The changes involved first hand practical experiences which made the activities meaningful and therefore had a greater impact on my thoughts and my level of understanding. This comparison of me as a researcher compared with children as learners seems to indicate that conducive conditions for learning are not age related. Once we have learned how to learn we can put it into practice throughout our lives. Therefore adults who 'missed the boat' as children may either continue to miss out on learning opportunities or need to be given the tools to learn at a later date before they can move on. Maybe this has something to do with the difficulty in breaking cycles of deprivation in certain families or communities. This 'learning to be a learner' process can be described in terms of cycles of learning which expand like the ripples on a pool as we grow in age and experience.

7.3 Implications relating to my second theme

Theme 2 – The impact of national policy - *the power of being a teacher researcher and the role of teacher researcher in implementing policy and delivering the curriculum.* This theme included the following areas:

- the early years curriculum;
- the Ofsted experience;
- the development and changes in environmental education;
- renewed interest by the government into using the outdoor environment as a base for learning.

My research has been done through the eyes of an insider researcher, through the research process I have discovered the power of being a teacher researcher in terms of delivering the curriculum and at the same time overcoming obstacles and pressures which may otherwise have seemed impossible for one small setting to tackle. It has been firmly based on the observation of children and through my interpretations of these observations I have been part of the team which has improved practice. We have demonstrated that when a team works together and shares a philosophy then powerful things can happen and I have been privileged to be part of such an inspiring and supportive group of people. Through the research process the children have empowered me to influence good practice and make

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changes. The children have been the ones with the power to do this because without their exciting contributions and interactions there would have been no research study. By their actions the children in my setting have had the power to change practice for themselves and for other children who will follow in the future. I have discovered that observation is a very powerful tool. Our setting has been through a process of evolution rather than revolution as we have taken small steps towards our goal of making better use of our nursery garden and then moving beyond the garden to establish a forest school approach. It is precisely the uniqueness of each setting which adds to the argument for re-visiting the principles of early years' education through the research process. I would recommend practitioners engage in the research process and also take another look at the outdoor environment in their surrounding area and think about the potential opportunities there may be to allow children greater access to a wider outdoor experience.

As my project progressed, so did environmental education, from a cross curricular theme in schools into education for sustainable development. This became much more closely linked with conservation, recycling, energy, waste, composting, rain forests and endangered species etc. which took it further away from what I was doing. At the time when I began my research, people who believed in the seriousness, or who even believed in the existence of global warming, were in a minority; it was a fringe concern and not on the mainstream political agenda. Gradually over the years more evidence confirmed that our earth was getting warmer and it was our responsibility to put it right. Strangely, as this concept became mainstream, education for sustainable development began to move back towards a concept of environmental education defined as being *in*, *for* and *about* the environment which had more in common with the work I was doing. The OFSTED report Learning Outside the Classroom (2008) supported this idea. Policy makers have the power to reduce barriers which often prevent appropriate interactions in the outdoor environment from taking place.

7.3a Implications for the child
Most of the implications of this theme are related to the role of the practitioner and the role of being a practitioner researcher which is an empowering process and it has given me the opportunity to question issues I have previously felt powerless to change. In relation to issues of power in the early years' setting, I have established that the adults have the most power but they operate under a system in which others outside the setting have power to control the curriculum and teaching styles

which are put into practice. This in turn limits the power of the practitioner. Little attention seems to have been given to the power of the child who is on the receiving end of education and to the parents who are a child's primary educators. Parents can feel powerless when it comes to their child's education, especially if, for them, school had been a negative experience or if they felt inadequate in their own educating skills. How much power the child has over their personal learning will depend on the way the setting is organised and the curriculum interpreted and delivered by the adults responsible. The EYFS presents children with a list of goals to be achieved even before they have stepped foot into a setting. It remains difficult to see how an individual child centred approach can work for a child within the constraints of the ELG's.

7.3b Implications for the practitioner

The Start Right Report (1994) discussed in Chapter Two, emphasised the importance of skills and attitudes including motivation, socialisation, confidence, emotional well being and a sense of belonging as being key factors in successful learning. I expanded on the importance of learning dispositions in Chapters Three and Six. Practitioners need to be aware of these dispositions which enable a child to be a successful learner as acquiring them allows us to become lifelong learners. We should be preparing children for the rest of their lives and this should include the excitement of being a life long learner and not just showing them how to jump through the next hoop to achieve an objective. As practitioners we sometimes feel we are compromising children's long term chances for short term achievements, which are actually more in the interests of the school or local authority or government than the child. If practitioners are looking to provide meaningful learning experiences, where thought processes can develop, then our starting point should be based on what a child knows rather than what a child does not know. The EYFSC is based on a set of goals which children are unlikely to know when they enter a setting at the age of three years, regardless of their stage of development in thinking skills. We have to question whether we are teachers or technicians. As teachers, we need to be given freedom to use professional judgement rather than simply swallowing the pill for the latest directive. By engaging in action research, I have felt empowered to challenge some of these issues.

Opportunities for practitioner research should be built into the process of continual professional development for all teachers who want to engage in the process. This should not add to the work load of a teacher. Opportunities should be made available for practitioners to stand back and look at issues which interest them

through a research process and to engage in professional dialogue. It is important for practitioners to have the opportunity to follow their own interests and develop their own practice in just the same way as it is for children. My recommendations for policy and practice include providing opportunities for people in the early years to be aware of different positions on the curriculum and different positions on how children learn as this impacts on what is taught and how it is taught.

By taking part in an action research process I have been able to find my own evidence, come to my own conclusions, challenge policy with a degree of confidence and act on behalf of the best interests of our children. I have become part of a critical friendship group with the practitioners with whom I work and together we have explored issues which have been important to us all. By undertaking a collaborative research process, practitioners continue to assess their own practice and to look at research, policies and practice with critical eyes.

This leads to a deeper level of knowledge and understanding about what children learn and how they learn. It also means practitioners are more likely to question policy which is handed to them from above at whatever level. I believe this is good for early years settings but I'm not sure government would see it in such a positive light! Research opportunities should be available and supported as part of continued professional development for those who wish to engage in it. At the moment all funded courses in Nottinghamshire, open to practitioners, are based on small scale in-house training sessions. If practitioners want to link with a university to do a nationally recognised course, they have to use their own time and money. I would like to see funded opportunities for teachers to engage in research with the support of universities, leading to the acquisition of points towards a higher degree. This would give an added incentive and sense of achievement for engaging in practitioner research. It would also give more practitioners access to university libraries and it would be in the interests of all local authorities to arrange with their local universities for teachers to have access to their libraries during the summer break. This is a quiet time for the library and a good time for teachers to do some professional reading.

Practitioners need to develop skills of observation and allow time to stand back and practice this skill. In an early years' outdoor play setting children need to be able to make their own choices and I would suggest practitioners need to observe children more in order to understand these needs. Observation should not be based solely on watching a child for assessment purposes in order to monitor their progress along the long road to achieving the ELG's but to find out what children like to do, who they play with and how their games can be supported and moved

on. For example, my action research approach has prevented me from dismissing wheeled toys because they cause friction and disputes between groups of boys. Instead, I was able to look at the reasons why wheeled toys were more popular than any other activity in outdoor play and then work towards creating a situation where access was available but manageable. The outcome, described in Chapter Six, was to buy more wheeled toys, provide a separate bike shed where children could access wheeled toys for themselves and to create an additional BMX style track in another area where children learn to ride a bike with two wheels using the Danish style of removing the pedals. For my setting, this situation has taken several years to establish and it is still developing.

Practitioners can be distracted by deceptive terminology but empowering practitioners through the research process can help practitioners to understand what is happening. For example, when curriculum guidance refers to *multi sensory experiences in a structured way*, this tends to mean '*set up a formal learning task*' which may not be following a child's interests but is following the interests of the pre-set goals. Children are less likely to be drawn to literacy and numeracy tasks outside if they appear to be adult directed and structured, such as activities disguised as games like counting numbers along a chalk ladder or throwing bean bags into numbered hoops. Literacy works well if story telling is done in a meaningful context, for example hiding in real dens when telling the story of the Three Little Pigs. Counting works if it is part of an environmental activity, for example estimating and counting how many snails there are there in the compost bin today. Sometimes the term 'structured' is used to hide the fact that what is really meant is 'formal teaching'. Practitioners need to be aware of the difference between teacher dominated and overly formal activities which are just delivered outside and real teacher facilitated, child empowered activities which involve deep learning in the outdoor environment. It is through these facilitated activities that children's learning can best be extended.

Practitioners need to be aware of the implications for assessment. The idea of using imaginative play situations to assess a child and to demonstrate what they are potentially capable of, seems much more appropriate than ticking a list of pre-determined goals. I have observed many children who display high levels of imaginative play and verbal communication skills but who reflect less well on the ELG test because they are not ready to hold a pencil effectively or recognise letters. It is disappointing to see data being used about a child that may not reflect their ability or potential. Vygotsky's view of using child supported activities as a

better mental test than looking at what a child can do alone, is a significant one. As seen in Chapter One, he believed imaginative play to be an excellent vehicle to support children through the zone of proximal development (ZPD). He suggested this is because children could imagine themselves beyond what they could do in ordinary situations. Imaginative play easily allows children to talk to themselves about what they are doing, which appears to support this learning process. This 'private' speech is a good indication that the child is being challenged to work within the ZPD. My research reinforces the view that the outdoor environment is particularly rich in providing opportunities for imaginative play and for the practitioners to assess children through observation.

7.4 Implications relating to my third theme

Theme 3 – The development of the outdoor environment - *the importance of giving children the opportunity to interact in the outdoor environment through outdoor education.* This theme included the following areas:

- the history of the nursery garden;
- outdoor play;
- play spaces and gardens;
- the forest school approach;
- nature deficit theory.

When we work with children outside, some of them are tuned into outdoor learning straight away; others take time to develop an understanding of how to learn outside. Perhaps the first group are the ones that Howard Gardner referred to when he developed a theory of multi intelligences and added the eighth intelligence, the naturalist intelligence which applied to people who have a special ability to learn in and about the natural world (Louv 2005). I cannot prove the negative effect of not allowing our children sustained contact with nature but I have demonstrated the positive impact for our children of spending time outside. I have observed the impact of introducing a forest school experience to the children in our setting and of offering extended outdoor play opportunities where children are empowered to make choices and to continue with an activity over a period of time. I have also shown that supporting a child's interest or schema has a positive impact on their learning and that the words 'regular' and 'sustained' are critical in this context.

7.4a Implications for the child

Outdoor play offers children opportunities for learning that an indoor play environment may not easily provide, such as space, freedom, stress release, room for lots of big movement and opportunities to sustain a deep level of involvement either alone or with others. Children need time to explore play activities in depth over a number of days in order to maximise opportunities for deep involvement. Through my observations I have shown that children need time to observe, to learn from the actions of their peers as well as adults and then to practise what they have observed in their own time. This is a pattern which is seen in nature as young animals develop their skills for adult life. Children love playing outside. Sometimes when children are clustered together inside in a confined space they become irritable as they jostle for space, resources and room to move and stretch their bodies. Outside these flash points for conflict are significantly reduced.

My research has shown that some outdoor play activities are consistently popular which demonstrates once again that if we observe children they will tell us what they need to do for effective learning to happen. The activities my children demonstrated to be most popular were:

- bikes and other wheeled toys;
- building activities and digging pits;
- tending the sensory garden and other related activities such as watering, composting, planting and finding out about garden wildlife.

Water was a theme present in the most popular activities. For example, children spend a long time painting their construction work using a paint brush and a pot of water or watering plants or making mud. Therefore free access to running water enhances outdoor play opportunities. Water does not need to come from a tap but could be from a barrel of collected rain water. All of these activities are important to incorporate into any outdoor experience.

7.4b Implications for the practitioner

The environment in which we learn provides sensory experiences and is a key factor in the way knowledge, skills and understanding develop. Practitioners are the people who have the power to create a learning environment which motivates, enables, excites and inspires. The outdoor setting can do all of these things if the adults allow the opportunities to happen. Working outside has been well

established over the years and there is a case to promote the outdoor environment as a place to inspire and enrich learning opportunities. Children learn to co-operate, manage risk and work independently, and these activities happen so naturally outside when children experience freedom from tight adult control, a sense of empowerment, responsibility and aesthetic inner peace which grows when they really use an outdoor space. Children can develop a sense of spirituality which may be lacking in their lives. I hope this study will help to promote the use of outdoor spaces to enrich children's well being.

Fig 7.1 Ripples beyond our nursery setting

7.5 Being an insider researcher

Through observation, I internalised what was happening in my setting using imagery, I then added the words so that the images made sense to others. I found it was good practice for me to visualize a situation and then report on it. If I had not been an insider researcher it would have been very difficult to build up such detailed and instantly recallable images of the many interactions which took place in my setting. My data collection included many photographs of children at play and I feel the pictures helped to give the children a voice as well as producing an image of what they were achieving. By basing this study in my setting I have been able to test hypothesis and implement ideas. I have been able to observe the impact of changes over a sustained period of time. I have also been part of a team who has extended this work not only beyond the nursery garden but also beyond the boundaries of the foundation stage to influence work in the primary and secondary phase. (see Fig 7.1) Outcomes of being an insider researcher have therefore sent ripples beyond the nursery setting.

7.6 Disseminating findings

Disseminating findings is an interesting issue for a teacher researcher. Academic journals are the normal place to air findings but classroom practitioners are unlikely to read them and I wanted my research to give practitioners food for thought, to reinforce existing good practice, to encourage others to take the microscope to their setting and find for themselves the value of doing practitioner research. I want practitioners to be able to follow their own interests, to learn from their own first hand experiences and to take ownership of their findings. This would be in line with the way I feel children learn best but it would be naive to assume practitioners are always in a position to be able to act upon their own experiences, so my findings also need to make their way to the policy makers. They are the people with the power to enable practitioners to take a lead and think for themselves. David (1998 p 165) identifies five main specialist academic early years journals edited in the UK plus:

> *"a small number of practice-based journals, such as Child Education and Nursery World, both of which include research information and research-based discussions of practice. Articles in the latter type of journal would not have been expected to count towards an academic's submission to a Research Assessment Exercise in the past, despite their potential for impact on practice."*

It concerns me that academic circles might look down their noses at a practice based journal such as Nursery World. This is a widely read journal in early years' settings and I found it has been up-to-date with all the latest research and has been presented in a readable manner for everyone to access. I fear much useful academic work could have been lost over the years because it has only been disseminated in academic circles. When I turned up for my first session on a research methodology course, I was with a group of students who had already been on the course for some time. We were given a task of putting research related words into categories relating to their meaning, words such as epistemology, positivist, qualitative, triangulation, methodology etc. I may as well have been in a foreign language class and I have no idea what gave me the courage to go back the following week, as I felt way out of my depth. Over the years I have seen other potential researchers with great ideas fall by the wayside, often because the pressure of work, family, problems with finding funding all were too much but also because they felt out of their depth. This was a loss to the academic world as well as to the people concerned. I hope to disseminate my work in the widest possible community of people having an interest in good practice for outdoor education in the early years. My research is based in a small nursery setting yet I believe it has implications for everyone else working in similar situations. I hope I can inspire those practitioners to follow their gut instincts and take the plunge into outdoor education with renewed excitement for what it can do for the future of our youngest children. There is no sudden end result to improving practice. Practice improves because of and during a research process. It is easy to plan and deliver a set lesson but the real skill is in supporting children in their play and scaffolding their learning. The more difficult bit is to get people who have little understanding of early years' good practice and child development, to see what is going on and to value it. 'They look but they don't see' is a phrase that often springs to mind when outside observers try to assess what they believe is happening.

7.7 Final reflections

Ten years ago when I began this research I had no idea where it would lead me, I could not have predicted my research journey, but on reflection I am pleased with the direction I have travelled. The value of doing this study over a long period of time enabled me to follow changes at a local and national level and to observe their impact on my work setting. Being part and parcel of this research has given me a powerful insight into the situation I have studied because the research has

been woven into my day to day practice. Empowerment became a strong feature of this research. Consequently it led me in new directions based on situations which arose.

I am aware of the limitations that may be levelled at this work. As discussed in previous chapters, my data has been based on observations which were mainly restricted to the environment in which I carried out this study. Despite this I feel I can use them to justify shaping educational theory and practice beyond my setting. Stages of child development are universal within a cultural context which indicates that outcomes from learning opportunities are transferable. I also demonstrated in Chapter Six the potential for schemas to be universal. This would indicate that the learning outcomes from my observations could be applied to children in other settings. Not all things are age or developmentally linked. For example, learning to read and write are culturally determined and therefore children will not miss a window of opportunity if they do not start school at the age of four. In this country our culture has led us to push children into these learning tasks at a much earlier age than most other countries around the world and there is no evidence that it benefits our children in terms of their final educational outcomes. In fact many countries with later school start dates do much better than us.

In comparison to the American schools I visited in Maryland in 2005, children in education nurseries in England have much more freedom to explore their own learning but compared to some European and Scandinavian countries our children have limited free choice as I found on my visit to the Danish forest school in 2007. The forest school approach we introduced at Richard Bonington came out of a team commitment to ten years of research and experience. The process led to a 'bottom up' approach which has the potential to influence the whole school and beyond. These ripples went far wider than our nursery setting (see Fig 7.1) for example, developing our school field as a base for learning; reception children taking on board the forest school experience; parents opting to come to our setting in greater numbers since the approach was introduced; the local playgroup using our grounds for a forest school session; making links with our local secondary school; Nottingham Trent University students taking part in our forest school sessions; setting up a cluster group to encourage other settings to get involved in outdoor education; writing papers to disseminate the outcomes of this research.

The learning process is about the negotiation of meaning rather than its transmission; negotiation therefore implies a social context and a form of

communication taking place. Research into children's learning by Michael Shayer (2006) referred to in Chapter Two showed children today were between two and three years behind compared to his original group of children studied fifteen years earlier, the biggest drop being amongst boys. Shayer based his research on Piagetian tests because they provided a model to differentiate different levels of complexity. Shayer did not draw conclusions but did speculate that the lack of experiential play in primary schools along with the video / TV culture had taken away from children the opportunity to experience how the world works in practice and to make informed judgements about abstract concepts. This research could only add weight to the argument for children to be supported in the play activities which interested them.

I know that change has taken place in my setting but it is not just visual changes to the way things are set up or the resources made available or the way things are planned which has made the difference; it is the knowledge that myself and the rest of our team have gained over the years which makes the research valid for me. This has been perhaps the invisible thread which ran through everything we did. Our collective team knowledge about how children learned and developed, socialised and played, changed, matured and emerged as confident individuals ready for the next steps in their education grew all the time. It was our increased knowledge which shaped the way we responded to children, interacted with them, planned for them and evaluated their progress.

On the basis of my learning through the research process I feel confident in presenting the following recommendations which form the framework for effective early years' provision in outdoor education:

1. At the heart of the curriculum should be the impact of dispositions for learning on children's outcomes. This would give children the tools to become effective life long learners and enable them to reach their full potential. Learning dispositions link to the theory and practice of being an effective learner. To enable this to happen the curriculum should be based on a constructivist stance allowing children to build on their previous knowledge and understanding rather than having to work towards a 'one size fits all' list of pre-set goals.
The individual learning styles of children should be encouraged and supported by practitioners through observation and by identifying

schemas. Children should have time to learn through movement and all of their senses and be given time to develop their own ideas in depth. Children should be able to make choices in their learning outside, which includes access to resources, being allowed time to learn through the observation of others and being supported and valued in all forms of communication not just the spoken word. The role of the practitioner is crucial in providing the enabling environment, the verbal interactions and the learning support to facilitate this approach.

2. Practitioners should be encouraged to engage in action research as the empowerment it offers can support continued professional development by offering practitioners the opportunity to develop and expand on their own practice. It can also help practitioners to deal with issues and pressures which seem hard to overcome. The research process allows practitioners time to study theories about how children learn and how different theories relate to an early years curriculum and government policies.

3. All children in the early years should have the opportunity for daily outdoor education. The outdoor environment should be offering children the opportunity to connect with the natural world, to establish aspects of spirituality, to experience moments of wonder, of calm, of excitement and exhilaration. One of the best ways for this to happen would be through a regular forest school experience as part of every child's entitlement in an early years setting. Children should be empowered to make choices by being presented with an enabling environment which can be accessed when children engage in outdoor play such as presenting children with access to resources in themed storage places. Children need a stress free place to become effective learners and the outdoor setting provides that environment. Working outside stimulates all of the senses and offers the basis of a healthy lifestyle. The outdoor setting also provides a place where children should also be encouraged to learn how to manage risk.

My findings support the need for our education system to offer children the opportunity to learn through play and to have a level of responsibility for their own learning. There is great potential for children to add value to their future education, health and wellbeing, if they have experienced a wealth of outdoor learning

opportunities which establish a firm foundation for the rest of their lives. In recent years I have noticed an increased interest in schools making use of the outdoor environment. From our experience, parents are increasingly worried about academic pressure and increasingly supportive of time spent outside. There are green shoots for the future as the positive role of outdoor education gradually becomes acknowledged. As a research base is built and strengthened it gives momentum to support policies which remove the constraints on practitioners enabling them to pave the way for good practice when using the outdoor environment as an entitlement for all our children.

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