Author(s): Kathryn Dukes

Title: Whole brain teaching and learning in an infant classroom: An empirical study

Date: July 1996

Originally published as: University of Liverpool MEd dissertation


Version of item: Submitted version

Available at: http://hdl.handle.net/10034/110418
Whole brain teaching and learning

in an infant classroom:

an empirical study.

Kathryn Dukes

Dissertation submitted for the Degree

of Master of Education in the University

of Liverpool in part fulfilment of the

Modular Programme, July 1996
ABSTRACT

The study explores the validity and applicability of ideas deriving from what is known as 'integrative learning'. The investigation took place over a twelve week period with a class of Reception and Year One children in an urban primary school situated in a family stress area. The research focuses on activities associated with 'right brain thinking'. 'Circle time' and other activities designed to encourage a positive self-concept in the children and positive interpersonal relationships were trialled along with scripted fantasy, which was introduced with a view to enhancing the children's imagination and the quality of their language work.

Evidence is provided of particular positive effects resulting from the introduction of the activities; these include more positive interpersonal relationships, improvement in academic achievement and increase in motivation.
The work is original and has not been submitted previously in support of any degree qualification or course.
<table>
<thead>
<tr>
<th>Part</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Laterality of the brain and its relationship with teaching and learning.</td>
<td>4</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>Self esteem and interpersonal relationships.</td>
<td>20</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Scripted fantasy.</td>
<td>31</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>The research - its design and implementation.</td>
<td>46</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>Some comments and conclusions.</td>
<td>82</td>
</tr>
<tr>
<td>Bibliography</td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>
Introduction.

In the last twenty years there have been some very promising lines of research into teaching and learning which offer tremendous potential to the teacher. I began to be interested in finding out more about the potential of the human brain and the implications this had for my teaching when I first read Kline's book 'The Everyday Genius' (1988). This whetted my appetite to find out more about the two hemispheres of the brain and their differing but complementary functions in thinking and learning. I decided to try to find out if there were benefits to be had in adjusting my present teaching methods to give more opportunities for right-brain thinking in my classroom, where hitherto I had placed more emphasis on traditional left-brain approaches.

Throughout my professional life I have always endeavoured to keep abreast of the latest research into teaching and learning and to incorporate new ideas into my work in the classroom where this seemed appropriate to improve my practice. I wanted to investigate whether Kline's (1988) ideas had any relevance to children as young as those in a Reception class and began to look for suitable activities associated with right-brain thinking which I might try out with my class to find their effects. Following an extensive literature search I decided to trial two types of activities which were different from my normal classroom practice. These were chosen because of the particular make-up of my class at the time. Our school is
situated in a 'family stress area' and I had the Reception class of new intake children together with four Year 1 children who had found it difficult to keep up in their work with their peers during the previous year and, it was hoped, would benefit from further reception class experience for a term. I decided firstly to trial activities designed to encourage a positive self-concept in the children and to develop positive interpersonal relationships and secondly to explore the possibilities of using scripted fantasy with young children with a view to enhancing the quality of their language work. These activities are associated with right-brain thinking. (Herrmann 1988).

I chose to use a 'new paradigm' research method (Reason and Rowan 1981), where the children and I worked together as co-researchers in the project. I hoped we would find ways to enrich the children's experience in school and help them to develop their ways of thinking in order to maximise their learning potential. The activities chosen had not to be over-demanding of time and had to fit into the normal classroom routine.

Firstly, this paper contains a review of the literature about the functions of the brain and whole brain learning. This includes discussions of three models of the brain function, i.e. Maclean's 'triune brain theory' (Rose 1985; Kline 1988) Gardner's 'theory of multiple intelligences' (1983) and Herrmann's (1988) 'quadrality theory'. Kline's (1988) five 'learning modalities' are also considered.
Secondly, there is a closer look at the literature concerning self-esteem and interpersonal relationships and the use of scripted fantasy. A discussion of the research design and a description and analysis of what happened in the classroom follows with, finally, some comments and conclusions about the project.
Chapter 1. Laterality of the brain and its relationship with teaching and learning.

Williams (1983) traces the historical development of beliefs about the functions of the right and left hemispheres of the brain. In the 1960s Sperry added to what was already known about brain function. By severing the corpus callosum, which is the connecting link between the two sides of the brain, he was able to study each in isolation. Sperry concluded that the left hemisphere processes with a logical, sequential, analytical approach which makes it efficient in processing verbal and mathematical information and in planning, while the right hemisphere engages in synthesis, explores relationships holistically, seeking and constructing patterns and recognising relationships between separate parts, which makes it efficient in visual and spatial processing and in dealing with emotions and response to music. However, he also concluded that for a person to function normally, both sides of the brain are needed to work together. (Kline 1988)

Bogan (1977) suggests the term 'appositional' to refer to right hemisphere skills, while 'propositional' is used to refer to left-hemisphere skills. The difference in function of the two hemispheres is in their information processing strategies rather than the content of the material with which they deal.
Rose (1985) outlines the functions attributed to the cerebral hemispheres and points out that the processes associated with the left hemisphere are those involved in what are generally termed 'academic pursuits'. Western culture places great importance on the attributes of the left hemisphere function and tends to value them more highly than those of the right. Rose notes that in his experience most secondary schools relegate right brain dominant activities to only two or three periods a week, but argues that where schools have increased the proportion of right brain activities there has been an improvement in all areas of pupils' performance. He suggests that this is because although the two hemispheres are specialised they are not isolated and each complements and improves the performance of the other.

Hawkes (1996) reports on claims by American researchers that extra lessons for children in music and art (associated with right brain thinking) resulted in increased achievement in reading and mathematics (associated with left brain thinking) as well as an improvement in classroom attitudes. The researchers concluded that 'Learning arts skills forces mental 'stretching' useful to other areas of learning.'

Bunderson (1989) asserts that the same content, whether verbal or non-verbal, can be processed via each hemisphere, although one of the hemispheres is generally more effective and efficient at processing the information and responding to it. He
explains that rapid transfer of information between the right and left brain is
effected by the existence of elaborate intercommunication channels through the
mid-brain and corpus callosum. This allows for hemispheric integration and
problem-solving with the co-operative use of the specialised capabilities of each
hemisphere.

Tyler believes from his examination of brain hemisphere research that

'Environmental (cultural) exposure is probably the largest influence on
development of hemispheric capacity, rather than anatomical asymmetry
which is a minor contributor.' (1985, p29)

From his understanding of brain function Kline concludes that

'Education, after all, should not be directed either to the right or the left
brain, but towards the goal of synthesising their actions into a harmonious
whole.' (Kline 1988, p74)

Models of brain function and learning styles.

Further investigations have elucidated more about the interaction of the two
hemispheres. Three useful models of brain function are MacLean's 'triune brain'
theory, Gardner's 'theory of multiple intelligences' and Herrmann's theory of
quadrality of the brain.

MacLean's Triune brain Theory.

According to the 'triune brain' theory put forward by Maclean in 1973 and
described by Rose (1985) and Kline (1988), the brain evolved in three vertical
layers. The oldest, or reptilian, portion of the brain which is located in the brain stem controls the vital functions of the body, taking care of our basic needs; when under threat we tend to downshift to use this instinctive, automatic response area of the brain. Whether the threat is real or imagined, the downshift response is the same.

The next layer of the brain, in this model, is the 'limbic system' or mammalian brain. This is the seat of emotion where feelings are activated. The two regions of the brain called the 'hippocampus' and the 'amygdala' are also situated here. These are involved in the transfer of information from the short-term memory to the long-term memory, the hippocampus transferring conceptual material and the amygdala emotional material. Kline (1988) points out that the two perform better when working together, which explains why memory is sharper when there is a strong emotional context.

Rose describes how young children learn as they experience life through play and suggests that part of the secret to successful learning is enjoyment. A positive emotional content to learning makes it easier to commit material to memory and to recall it when needed. In his discussion of the 'Accelerated Learning Programme' he pointed out how its success is based on making learning an enjoyable experience where tension has no place and the whole brain is united.
He says that

'When the conscious and subconscious, the long term and short term memory, the left and right hemispheres of the brain, are all involved and working together, the effect is not just doubled, it is compounded many times.' (Rose 1985, p140)

Rose (1985) asserts that committing new facts to memory depends on strong encoding which is facilitated by creating strong associations. Strong associations are built up using images of sights, sounds, feeling, tastes and smells. He points out that the stronger the original encoding is, the better the ultimate recall. All new information enters the short term memory but this is most successfully transferred to the long term memory if the brain is involved both emotionally and conceptually.

Rose points out how visual imagery can be deliberately employed to facilitate memorisation and recall of facts, just as memories may be triggered by their association with music or particular smells encountered in everyday life. He describes Wenger's work on visualisation and learning and summarises a basic principle;

'Whenever you close your eyes, visualise the subject and articulate that image out loud, you have achieved a left/right brain symbiosis and a fast route into memorisation.' (Rose 1985, p151)

Findings from Asher's earlier work on the principle of involvement (Rose 1985) had some influence on the methods used in the 'Accelerated Learning Programme' which was developed based on Lozanov's 'super-learning' method (Rose 1985). Asher concentrated on teaching pupils by commands which
necessitated a response and therefore involvement on the part of the learner. It was found that involvement and activity rather than passivity created a better learning environment.

The third layer of the triune brain model is the neocortex, where rational thinking takes place. Rose (1985) states that one's personality is determined by the interaction of the neocortex and the limbic system and also that psychologists believe that this interaction provides the most efficient way to achieve effective learning.

**Gardner's theory of multiple intelligences.**

The theory of multiple intelligences put forward by Gardner (1983) identifies seven intelligences which are possessed to a greater or lesser degree by each one of us, although since his early work Gardner has come to believe that there may in fact be many more kinds of intelligence. The seven intelligences seem to be neurologically isolated from each other in the brain, so brain damage or surgery affecting one kind of intelligence may well leave others unaffected. However, although each intelligence is independent of the others in its siting in the brain, normal functioning by the individual involves a blend of the various intelligences. The seven intelligences identified by Gardner are the linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, intra-personal and inter-personal intelligences. Right and left brain theory links the linguistic and the
logical-mathematical intelligences to the left hemisphere and the remaining
t intelligences to the right hemisphere.

Gardner was concerned that his research in schools showed a distinct imbalance
in the ways pupils are encouraged to develop their intelligences.

'\textit{The modern school places increasing premium on logical-mathematical}
ability and on certain aspects of linguistic intelligence, along with a newly
found premium on intrapersonal intelligence. The remaining intellectual
capacities are, for the most part, consigned to after-school or recreational
activities, if they are taken notice of at all.}' (Gardner 1983, p353)

Kline describes a variety of approaches to learning which deliberately involve
both the right and the left brain and asserts the belief that

'\textit{by changing the learning environment and the way information is}
presented, we can get substantially better results than are possible with
traditional education.}' (Kline 1988, p19)

Globerman (1989) describes how, because our culture values verbal thinking
over imagery, the former is encouraged to the exclusion of the latter. Piaget’s
theories of cognitive development (Flavell 1963) have described the gradual
development from the concrete, personal and active world of the child to the
abstract, social, systematic world of the adult. Globerman asserts that Piaget
pays little attention to some parts of human development including response to
sound and music, rhythm, movement and dance, psychological intuition and
imagery. She believes that it is important for all these areas of human
development to be encouraged and achievements in them to be celebrated, rather
than only the narrow area of achievement associated with left-brain thinking.
Herrmann's theory of quadrality of the brain.

Herrmann (1988) goes on to link what is known of the right and left hemispheres and of the upper (cerebral) and lower (limbic) parts of the brain in his theory of quadrality in his whole brain model. This model represents a metaphor of how the brain works, rather than a physiological brain map. Herrmann labels each of the four brain quadrants with a letter and associates particular thinking and learning styles and personalities with the dominance of each of these. He describes the A quadrant (upper left) way of thinking as logical, analytical, mathematical, technical and problem solving, the B quadrant (lower left) as controlled, conservative, organisational, planned and administrative. He characterises C (lower right) quadrant thinking as inter personal, emotional, musical, spiritual and kinesthetic while D (upper right) quadrant thinking is described as holistic, intuitive, synthesising, imaginative and artistic.

Herrmann studied the behaviour and interactions of a variety of people. He found that a person's brain quadrant dominance patterns are revealed in the way in which that person approaches the world and that these patterns may show a variety of multiple dominances which build up into an individual profile of learning and communication styles. Herrmann believes that, although individuals develop preferences for thinking in particular ways, one can be educated to develop other approaches and use these in harmony to make the best of any situation. He believes that individuals with similar preferences tend to
communicate with each other more easily than those whose preferences are dissimilar. The educator should be aware of this and consider and develop the most appropriate methods of communicating with students, who should be given the opportunity to approach ideas in their preferred styles, but encouraged to develop other ways of thinking.

Kline (1988) also describes four brain dominance preferences which are possible if the right and left limbic systems are considered separately. Firstly, a person with a dominant left limbic system, (Herrmann's quadrant B) Kline suggests, prefers a secure and regular environment. In school terms this would be supplied by the regular, predictable classroom rituals. Secondly a person with a dominant right limbic system (Herrmann's quadrant C) prefers to be part of group and this need is satisfied by positive interaction with classmates. Thirdly a person whose left neocortex (Herrmann's quadrant A) is dominant prefers to analyse things and fares best with information presented in a logical sequential way. Lastly, a person whose right neocortex (Herrmann's quadrant D) is dominant prefers experiential learning situations where ideas and information are synthesised from direct experience. As each person may have a preferred approach to learning linked to their brain function, it is important that the learning environment provides a balance of opportunities so that each person's needs are satisfied.
Rose (1985) discusses McCarthy's identification of four different types of learners. McCarthy describes the 'Innovative' learner who is imaginative and relates new information to his/her own experiences, the 'Common Sense' learner who likes to have realistic examples relevant to real life, the 'Dynamic' learner who likes to learn by involvement in specific experiences (Herrmann's quadrants C and D). The 'Analytical' learner she describes as one who likes to see the principles and concepts underlying the subject. She points out that only the last type of learner is actually a natural left-brain learner (Herrmann's Quadrant A) who will be comfortable with a verbal, logical mainly auditory approach. The others, who may be in the majority, are denied their preferred right-brain approach to learning by our traditional educational system. Rose asserts that,

'The ideal learning method will orchestrate left and right brain activity and employ a full range of visual, auditory and kinesthetic activities to make learning comfortable and to invoke the maximum response.' (Rose 1985, p161)

Like Kline, he points out that communicating with someone in their preferred mode is likely to result in better rapport with that person and this also explains how a child can do poorly at a given subject with one teacher, but blossom to achieve high levels of success in the same subject with another who employs a similar teaching style to the learner's preferred style.

Henry and Swartz (1992) assert that educators can, by knowing the preferred learning styles of their pupils and using teaching methods which match these styles produce improvements in the learning taking place which is evidenced by a
decrease in time required to learn material (or an increase in material learned in a given time), an increase in both initial learning and long-term recall and a less stressful learning environment.

The role of the senses, learning modalities and implications for teaching.

Information is taken into our bodies by the senses. The sensory system includes the five senses of sight, hearing, smell, taste and touch, together with the kinesthetic, vestibular and visceral systems. The kinesthetic system is located in the muscles, joints and tendons and provides us with awareness of body movement. The vestibular system, located in the inner ear monitors body position, movement, direction and speed. The visceral system detects sensations from internal organs of the body. Through sensory experience we are able to build up concepts of the world around us.

Kline (1988) describes five learning modalities, i.e. visual, auditory, print oriented, kinesthetic and group interactive and comments that the traditional classroom provides an environment most suited to those children whose preferred learning modalities are either auditory or print oriented and least suited to those with kinesthetic or group interactive preferred learning modalities. From my experience of primary school classrooms I would suggest that this is often the
case even in Key Stage 1 classrooms although perhaps less dramatically so than in those for older children.

Williams (1983) points out that a child’s brain continues to develop throughout childhood. Thus suitable classroom activities need to be planned to allow for and to encourage the child’s development in all areas, rather than concentrating on some areas to the detriment of others. Each child is then given opportunities to use his/her preferred modality while developing the remaining modalities concurrently.

Williams (1983) divides the teaching/learning process into three parts. Firstly the information presented must be taken in by the learner. Then it must be processed in order to produce understanding and finally that understanding should be expressed in some way. The final phase allows the learner to make sure in his/her own mind that (s)he understands the material and allows the teacher to assess learning and evaluate the activity.

These three parts to the teaching/learning process are termed 'input', 'synthesis' and 'output' by Kline (1988) and he states that learning has not occurred unless all three parts of the process have been experienced in what he terms 'integrative learning.' At the input stage the learner takes in information through the various modalities. At the synthesis stage, this input is compared with previous
experiences and assimilated, thus changing previously learned concepts in some way. The output stage, although often consisting of giving the answer to a closed question in traditional lessons, may be open ended, allowing the learner more freedom of thought and expression of ideas.

Williams (1983) identifies a variety of teaching/learning techniques which involve ways of processing information using right brain intelligence approaches. These are visual thinking, fantasy, evocative language, metaphor, direct experience, role play, multisensory learning and musical involvement. Some of these techniques are used by some teachers to supplement the work which is frequently heavily weighted towards a left-brain approach.

Williams describes a three-fold role of visual thinking in the classroom. The first role is observing through seeing and is a basic means of information gathering. Children need to practise looking carefully and interpreting what they see. Secondly, she says they need help in learning to represent information graphically, for example, in drawings, diagrams, charts, concept mapping, cartoons etc. and to interpret graphic representations shown to them. Finally she describes the need to help children develop skills in seeing and manipulating visual images. These skills may be put to use in, for example, learning spellings, working out mathematical problems involving spatial relations and trying out, mentally, solutions to interpersonal problems. While reading, encouraging the
child to visualise what (s)he is reading about can improve comprehension and recall.

At Key Stage 1 there is probably a more equal balance between right and left brain activities than at Key Stage 2 or 3. However, it seems, from the research findings above, to be important to ensure that all children are given a balanced diet of activities to allow for the development of the whole range of intelligences and ways of thinking, so that they may achieve their full potential.

On consideration of the research evidence described above for the different functions of the right and left brain, their involvement in the multiple intelligences and in preferences for the various learning modalities, I became aware that in my own classroom, even with Key Stage 1 children as young as Reception, there is a slight but definite tendency towards an imbalance of right and left brain type activities, with an over-preponderance of traditional linguistic and logical-mathematical activities and materials.

I believe this stems from two main origins. The first is my own predilection for auditory and print-oriented learning modalities with perhaps an associated assumption that what works for me must work for others too. By providing what would be the optimum conditions for my learning through my preferred modalities I am assuming that I am therefore providing optimum conditions for
learning for each child in my class. However, on the grounds of the research evidence described this is patently not so. Although I have been aware for many years of the need for a multisensory presentation of information, particularly for children with learning difficulties, I have assumed that if children appeared to learn through what I now recognise to be a left brain approach any other activities were superfluous or at best just enjoyable 'frills' in the learning process. I am now more aware of the importance of balance in learning, allowing children to develop all areas of brain function while having the pleasure of the provision of activities geared to their own preferred learning modalities.

The second reason, of which I am aware, for unequal proportions of right and left brain activities in my teaching, is my own tendency to try to fulfil other people's expectations of me. The general perception of our culture is that linguistic and logical-mathematical abilities are superior in importance and require superior intellectual capacities. Hence in schools teachers feel social pressure to try to develop and exercise in the children in their care, those aspects of intelligence valued most by society, i.e. left brain intelligences. In the primary school, while professing to aim at the education of the whole child, left brain attributes still tend to be given higher status than those associated with the right brain. As a part of the educational system it seems I have unconsciously accepted the prevailing attitudes and fitted into the role of teacher as expected of me.
Following my literature search I began to feel that there is a need for an increase in right-brain approaches to learning in my classroom and picked out two areas for further investigation. Those two subjects of further study were the encouragement of positive self concepts in the children and the development of interpersonal relations, (to help develop and exercise Herrmann's brain quadrant C) and the use of scripted fantasy in the classroom (to help develop and exercise Herrmann's brain quadrant D) with a view to enhancing the quality of the children's language work. Both of these areas were of particular concern to me in relation to the specific mixed age grouping in my class and the children's restricted language skills.
Chapter 2. Self esteem and interpersonal relationships.

One area of interest associated with the right brain is that of interpersonal relationships. When several people come together to work as a group, each individual brings his or her own characteristics which affect the working of that group. By how much and in what way the group is affected depends not only on the individual characteristics themselves but on the particular combinations of characteristics which interact. Research into the 'assembly effect', i.e. the variations in the group behaviour caused by the particular combination of individuals in the group, (Haythorn 1953, Rosenberg, Erlick and Berkowitz 1955, cited in Shaw 1971) verified the hypothesis that individuals contribute differently to the group product depending upon the other individuals making up the group. In my class, I needed to bring together as one group two quite different groups of children, i.e. new intake children with no school experience and a small group of Year 1 children with some negative experiences of school.

One important factor which affects group interpersonal relationships is the cohesiveness of the group, i.e. the attraction of members to the group and the degree to which they are motivated to remain as part of that group. Members of highly cohesive groups are generally more co-operative, more friendly and more likely to work for the good of the group than members of low cohesive groups who often tend to develop more interpersonal conflicts. A particular individual's
attitude to a group is related to how attractive other members are to that individual and how accepting the other members are of him/her. This in turn is closely related to the individual’s level of self-esteem. A person who is attracted to a group and accepted by its members will experience an increase in self-esteem. The converse is also true. Rejection by other members of the group decreases self-esteem. This is particularly relevant in the infant classroom, where pupils who have poor self-images tend to dislike and be disliked by other pupils.

Pupils' self concepts are strongly influenced by the reactions to them of other members of the group. Coopersmith’s work (1967) shows how a child’s attitudes about him/herself are formed by how the child perceives that significant others view them. Borba and Borba (1982) identify three components of self concept: the physical self (how the child views his/her bodily appearance and performance), the thinking self (how the child views his/her learning ability) and the social self (how the child views his/her relationships with others). They assert that many positive experiences in each of the three components are necessary for the child to build up a positive total self image. Negative experiences will diminish it. Through feedback from classmates and the teacher, children develop a perception of how they believe others view them. Unfriendly actions engender a negative self-concept which in turn leads to further negative reactions from others. These uncomfortable relationships may prevent the pupils from concentrating on their academic work so they are unable to study or learn.
effectively. Low self-esteem can drastically undermine academic performance (Johnson 1970 cited in Schmuck and Schmuck 1979) However, through suitable activities in school, children can be encouraged to view themselves as significant beings with feelings of self worth, and to respect and interact positively with others.

David McClelland and his co-workers (1953) put forward their view that the search for self-esteem takes place in three areas, those of achievement, power and affiliation and affection. Frustration in any of these areas reduces the individual's level of effective functioning in the group: for example, in the area of achievement there may arise feelings of inferiority and inadequacy leading to reduced interest in learning and less energy expended on working at the task. In the area of power, there may arise feelings of being 'put down' or ignored which may lead to overt aggression, covert deviousness and anxiety so that levels of performance and co-operation are reduced. If frustration occurs in the area of affiliation and affection this causes feelings of rejection, loneliness and insecurity.

Pupils who feel accepted and involved in the group find it easier to communicate with other members and express their feelings more openly. They are also more likely to try to influence the group with their ideas. If a pupil feels rejected by the group or feels that other members have a low opinion of him/her and his/her
ideas, (s)he is unlikely to put him/herself or his/her ideas forward and risk ridicule.

Schmuck and Schmuck (1979) report similar findings. They state that human beings strive to be loved, or, at a minimum level, to be personally related to others in order to feel secure and comfortable. Without affiliation an individual cannot make full use of his/her potential as (s)he has first to cope with his/her feelings of worthlessness, loneliness and anxiety. The supportive climate of the friendship group gives its members the confidence to express their own ideas and to accept the feedback, whether positive or negative, about those ideas. Rejection of ideas is not so likely to be felt as a rejection of the person him/herself.

These findings apply to groups of children in the infant classroom. When a pupil is placed in a group where (s)he feels liked and respected this positively affects his/her self-concept and academic performance. Pupils with support from friends can work more effectively and happily than those in groups where they feel insecure and anxious. Feelings of interpersonal support and helpfulness can improve a pupil's efforts towards achieving individual or group goals and enhance eventual academic performance. Associating with friends for work in the classroom can satisfy a pupil's need for affiliation, thus enhancing his/her self-esteem and giving rise to more favourable conditions for success in the activities.
Maslow's (1970) theory for human motivation involves a hierarchy of basic human needs, where the needs are organised according to their relative prepotency. Physiological needs are seen as being first in the hierarchy, but once these are satisfied, then other higher needs emerge which predominate.

Second to emerge in the needs hierarchy are the safety needs. These include the need for security, freedom from fear, freedom from anxiety and chaos, protection, structure and order. If frustrated these needs will dominate the individual affecting the way in which (s)he views his situation and the world. However, in the security of the infant classroom these needs are usually satisfied, so new, higher needs emerge which Maslow classifies as the belongingness and love needs. The individual needs to feel that (s)he belongs to a group and is loved and accepted by its members. Without the satisfaction of these needs, feelings of loneliness, ostracism or rejection and friendlessness colour the individual's view of life and affect his/her every action, leading to negative interpersonal relations. Maslow's belongingness and love needs correspond to Schmuck and Schmuck's (1979) affiliation needs.

Further needs to emerge are the esteem needs - both the need for a stable, positive self-esteem and for the esteem of other people. Satisfaction of the self-esteem need gives self-confidence, feeling of worth and of being useful to the world, while thwarting of the needs is likely to cause feelings of weakness,
inadequacy and uselessness, which discourage the individual in all his/her endeavours.

These first three needs Maslow identified can be associated with the reptilian brain and limbic system and these must be catered for in the classroom if a child to feel comfortable enough to use his/her neo-cortex efficiently. In the classroom situation, it might be expected that when a pupil is free from interpersonal threat, when his/her safety, belongingness, love and esteem needs are being met, then (s)he is in a position to look outward into the world, to explore new ideas, take on new challenges and attempt to solve academic problems.

Ellison (1993) discusses students' physical and emotional needs in some detail. She describes an educational system in the sixties as one where 'control by fear' abounded, where students felt continuously threatened by tests, grades, embarrassing verbal reprimands and physical punishments and hence where academic thought was restricted and stunted. In contrast to this, Ellison recommends 'a caring, trusting community' as a base for quality education as 'Such a community meets the basic needs of the Reptilian and Limbic systems.'

One way to help to develop such a community is, she says, by directly teaching all children pro-social skills including positive ways of resolving conflicts. She advocates a shift in approach from one of control to one of respect, where lessons
are planned to match the diversity of needs of the pupils, stimulating both left and right brain activity, promoting positive social skills and nurturing a sense of belonging. Good educational practice, she believes, depends on the teacher’s recognising how the brain works and providing an environment in which it can do its job effectively.

Managing peer relationships can give children the opportunity to learn about a variety of social experiences, for example, co-operating with equals and managing conflict. Dunn (1988) asserts that early childhood relationships are associated with the quality of later relationships in adolescence and adulthood. Duck (1991, 1986) concurs, but suggests that,

'Ironically, governments spend vast amounts of money on teaching children academic skills, but ignore those relating skills which are just as important to adult happiness and success.' (Duck 1986, p151)

Woods (1983) identifies a number of social skills required by a child if (s)he is to be a competent member of a group. He includes in the list such skills as being able to gain entry to group activities, knowing how to express oneself and act when with one’s peers and how to manage conflicts appropriately.

Pollard (1985) notes children’s interest in 'retaining dignity' in school, describing this a being 'crucial for the preservation of self- and peer-group esteem.' Children who feel in danger of threats to their dignity in the form of,
for example, 'put downs,' teasing or being 'shown up' by either teacher or peers find it difficult to concentrate on the academic task in hand.

Duck (1991) also comments on research by Adler and Furman into unpopular children, supporting their view that unpopularity stems from poor communication between the child and others, rather than being just the fault of the unpopular child alone, thus highlighting another important reason for helping children in school to develop their interpersonal relationship skills.

Frey and Carlock describe Kelly's (1962) ideas about a fully functioning person. Such a person they say,

'\textit{thinks well of self; thinks well of others, recognises the importance of relationships with others; sees self as part of a world in movement, in process of becoming; is optimistic, sees the value of mistakes, develops and holds human values; lives consistently with self-values; and is creative.}'

\textit{(Frey and Carlock 1989, p42)}

There is, then, an important place in the classroom for the encouragement by the teacher of improved personal relationships between pupils and more positive group development. Where friendship patterns are diffusely structured in classrooms the pupils' feelings of high status and emotional support from others in the group lead to high self-esteem and low anxiety, so that the pupils are able to perform well academically in a secure atmosphere.
Centrally structured friendship patterns tend to emerge in the more traditional classrooms where there is less opportunity for peer group interaction. In this case, with the more obvious display of socio-emotional status, pupils who feel themselves to be rejected, ignored or not liked by others have lowered self-esteem and feel uncomfortable or threatened in the classroom. A reduced level of application to academic work follows.

Ideally, in a classroom with diffuse friendship patterns any pupil should be able to feel secure and work well in a group with any other members of the class. In their discussion of peer tutoring and learning teams, Good and Brophy (1978) have put forward a warning about the possible dangers of pairing or grouping 'best friends'. Continual grouping with 'best friends' reduces the opportunity for members of the group to interact with other people in the classroom so that more diffuse friendship patterns are less likely to be constructed.

Borba and Borba (1978) assert that there is a strong correlation between a child's self-esteem and his/her academic success and that as a consequence early childhood education is a crucial stage in the child's affective development. As the child enters school (s)he meets people other than parents whom (s)he will regard as significant in his/her life. Those significant others - teachers, other adults in school and peers will exert an influence on the development of the child's self concept. It is therefore of paramount importance that opportunities for the
development of a positive self-image abound in the Nursery and Reception classrooms.

Frey and Carlock (1989) consider that self-esteem is a process, saying that the groundwork is laid in the child’s early years, but the self concept is gradually shaped throughout the lifetime and people’s beliefs about themselves influence how others view and treat them. They also point out research findings (Hartline 1982) which demonstrate a high correlation between positive self esteem and academic achievement and low self esteem and non-achievement and under-achievement. Students who feel good about themselves and their ability to learn tend to like school more, stay in school longer, attend regularly and learn more.

The converse is also true.

'Love of others and of ourselves are not alternatives. On the contrary, an attitude of love towards themselves will be found in all those who are capable of loving others.' (in Frey and Carlock 1989, p13)

Low self esteem gets in the way of developing positive relationships with others. Elkind (in Borba and Borba 1978, p19) suggests that the norm whereby intellectual development is valued above personal and social development encourages problems and failure for the children in our schools.

'In a large measure, most of our anxiety about the large number of unhappy and unsuccessful students in our schools is derived from a contemporary over-emphasis on intellectual growth to the exclusion of the personal-social side of development. Although I know it sounds old-fashioned to talk about the 'whole child' and 'tender loving care', I strongly believe that most problems in child-rearing and education could be avoided if the adult's concern for a child's achievement as a student were balanced by an equally strong concern for his feelings of self-worth as a person.'
Rogers (1983) also talks about the importance of 'love and trust' between group members in teaching/learning situations, pointing out the dangers of regarding cognitive learning as the only learning of importance. He raises awareness of the desirability of helping the student to develop a 'feeling life as well as a cognitive life.' (Rogers 1983, p142)

As Moustakas asserts, the teacher's attitude holds the key to establishing a suitable environment for each child's affective development,

'By cherishing and holding the child in absolute esteem, the teacher is establishing an environment that facilitates growth and becoming.'
(Moustakas 1966, p13)

In order to develop interpersonal relationships in the classroom so that children are able to work together most effectively, the teacher must be aware of the personalities, abilities and needs of each individual pupil and provide an environment and activities which will help to enhance their self-esteem and allow progress to be made in finding and understanding ways of relating to each other.

This area of school experience, which is associated with right brain thinking, became one focus of my research. The second focus also associated with right brain functioning, was scripted fantasy and examination of the available relevant literature follows in the next chapter.
Chapter 3. Scripted fantasy.

Williams (1983) describes fantasy as both a teaching technique and a thinking skill which every student should be taught to use. Fantasy is the ability to generate and manipulate mental images. She asserts that as well as being a pleasant and motivating experience, fantasy is an important skill which is useful in problem solving and various forms of creativity. Verbally presented material can be converted into images allowing interaction with the material through different modalities and consequently the material is made more accessible and more comprehensible. Hall et al (1990) also assert that fantasy can be used to improve both academic and social performance by, for example, improving the quality of creative writing or by mental rehearsal for an interview.

Glouberman (1989) describes how she uses imagery in psychotherapy sessions in order to help people to take control of their lives, but states her belief that imagery should be integrated into the educational process, rather than being used only for people with problems. She asserts that both words and images should be used as modes of thinking.

'From everything we know about creative thinkers, successful achievers, and healthy happy people, there is no doubt that the most productive way to think and to be is to use both.' (Glouberman 1989, p4)

and she laments the fact that

'Unfortunately, while verbal language is emphasised and developed every day in school, imaging has the status of a forgotten art, almost totally
ignored in conventional education and training.' (Glouberman 1989, p5)

Glouberman (1989) believes that, although as adults verbal language is our main tool for making sense of the world and ourselves, verbal language cannot be used to represent all parts of ourselves, our feelings and our understandings and is by definition restrictive. Therefore she advocates learning to use imagery to symbolise experience and to learn from it and cites Einstein as an example of a person who always thought first in images and later translated his understandings into verbal form.

'images, in contrast to words, can be described as tangible rather than abstract, holistic rather than analytic, personal and idiosyncratic rather than socially constructed, spatial rather than temporal and metaphorical rather than literal. They also enable us to live through any experience, past, future or totally imaginary, as if it were happening in the present.' (Glouberman 1989, p23)

Glouberman explains how her own approach to imagery has been developed over the years, influenced by Perls’ (1969) Gestalt Therapy approach to the utilisation of images to reveal deep meanings and new perspectives, by Bandler and Grindler's Neurolinguistic Programming (1979) and by Silva’s Mind Control techniques (1978) which emphasise the power of imagery to facilitate one's own personal effectiveness and ability to relate to others.

Although fantasy has been used in sport and medicine for some time, Hall et al suggest that its potential in education has, as yet, remained largely unrecognised.
They and Williams (1983) assert that employing fantasy to improve performance is applicable in a wide range of situations in school and that

'**the creative teacher can harness its power to improve cognitive, affective and social skills.**' (Hall et al 1990, p125)

Fantasy allows the imagination to manipulate images in ways which would be impossible in the normal world. There are no limitations of time or space. In the imagination one can be any size, anywhere and at any time. One can project oneself into any place or situation and explore it mentally or become an object, animal or person and feel what it is to be it/him/her.

Glouberman (1989) writes of 'boundaries' which are developed by the individual over time. She describes imagery as a 'window' into a dimension which has no boundaries of past, present and future and no boundaries between people and events. She suggests that young children who have not yet been conditioned by our culture into developing these boundaries may already be more easily in touch with this dimension and perhaps may be able to utilise imagery more easily than adults who may feel much more self-conscious about the whole idea.

Rose (1985) quotes Doman's belief that our ability to use our brains can and does improve with practice so that older children and adults can develop and improve their powers of visualisation and imagery with experience. Doman says,

'**The brain has infinite capacity. The more you put in the more it will hold. The human brain grows by use - the way biceps do. Every time we use visualisation, the ability to visualise expands.**' (Rose 1985, p209)
To make the best conscious use of imagery Glouberman believes that the imagery should be guided with understanding and care. She says that,

'Basically guiding imagework effectively involves learning how to combine staying in contact with the reality of the image, with using structure and reason to provide a context, meaning and direction.'

and goes on to liken guided imagery to

'an adult taking the hand of a child and exploring an exciting world together, mutually respecting the qualities each brings to the adventure.'

(Glouberman 1989, p63)

Fantasy is a right-hemisphere function and consequently differs markedly from the thinking of the left hemisphere. Williams (1983) contrasts active left-brain thinking, where the mind consciously manipulates ideas, to the thinking of the right brain which is less conscious and non-verbal. She states that in fantasy one receives images from the right hemisphere, but the experience can be manipulated and directed as it goes along. However, trying to force a fantasy is counter productive as this tends to block imagery. Instead, if fantasy is to be used positively, suitable conditions must be created. The mind must be in a state of relaxed attention, alert but receptive. When a suggestion is given, the mind then responds with the production of images which may be visual or linked to other senses. Hall et al (1990) report that students experiencing scripted fantasy described it as a unique experience in a state of consciousness not previously experienced by them. Only a small proportion of students reported no imagery at all and imagery did tend to improve with practice.
Creation of images, Glouberman (1989) believes, is a normal mode of thinking which evolves in thinking long before verbal language does. The young child does not learn about the world just by hearing about it, but rather by personally experiencing it directly using all of its senses. Language develops alongside experience allowing labelling of concepts and subsequent verbal manipulation of them.

Glouberman suggests that imagery has unique qualities which have the ability to connect us with parts of us which words cannot reach, such as thoughts, feelings, intuitions, and body functions which are normally unconscious, and that babies and young children are able to understand the world in ways in which adults have lost the ability to function.

One form of imagework is scripted fantasy, where a guide stimulates the production of a series of mental images by reading a prepared script. In scripted fantasy a preliminary relaxation exercise is followed by listening to a series of suggestions which are read out loud. These suggestions will have been carefully written to avoid a prescribed response. The suggestions or questions will be open-ended, allowing the listener’s own response to emerge. The fantasy does not necessarily have to follow a sequential narrative structure, although some do, depending on the aim of the exercise. During the fantasy the listener is free to follow his/her own exploratory path suggested by the script, so although the
script is the same, a group of people listening to it may have a wide range of differing experiences. After the fantasy session, participants may be encouraged to communicate their experiences, perhaps in discussions or art work.

Hall et al (1990) describe a variety of uses for scripted fantasy in the classroom, ranging from its use in personal and social education increasing self esteem, developing social awareness and skills and indeed fostering all forms of personal growth, to its use in other subject areas to widen and deepen children's understanding, for example, a fantasy about another time or place may improve understanding of a History or Geography topic. In English Literature lessons, becoming, in fantasy, one of the characters in a novel can allow for the exploration of the character's feelings and motives for action, thus bringing the book more alive.

Hall et al (1990) describe how reports of images in scripted fantasy tend to be in terms of visual descriptions. Some people report extremely vivid, colourful fantasies while for other people they are less distinct. However, fantasy may involve any of the other senses, for example, hearing, taste, smell, balance, feelings and touch. Glouberman (1989) avoids the commonly used term of 'visualisation' because of its inherent limitation of the experience to 'seeing' images as she believes that images may involve a variety of other kinds of perception. Individuals each have their own preferred sense modalities with
which they feel most comfortable. After a fantasy, reports of the experience will be given referring to those preferred modes. When used in the classroom the teacher may observe the use of language and encourage communication of the experience using matching language, for example, 'What else did you see/hear/feel?'

During the planning of the fantasy the teacher can try to ensure that questions are included which encourage the students to use a variety of senses in the fantasy to develop their repertoire of responses. Hall et al (1990) point out that the more senses that are used in the fantasy script, the more chance there is that every student will become involved, having the opportunity to use their preferred modalities. There will also then be the opportunity to practise using the non-preferred senses during the fantasy and subsequent questioning may encourage the student to think and talk in those terms.

Williams (1983) discusses the need for a classroom climate where there is a high level of trust, for scripted fantasy to succeed. If a child fears ridicule or criticism (s)he is unlikely to relax and participate in the fantasy or to volunteer information about his/her fantasy to others. She describes some possible reactions to initial attempts at scripted fantasy experience such as nervousness, giggling, excitement or withdrawal. Some children may feel too embarrassed to admit to enjoying the fantasy as it may seem far removed from normal classroom activities and thus be
rather suspect. Hall et al (1990) also discuss the subject of emotional preparation for a fantasy session. They point out that fear of the unknown may be expressed in nervousness or unco-operative behaviour. They suggest that firstly intellectual preparation is needed so that the children are informed of what is going to happen and why and that, secondly, emotional preparation is needed in the form of reassurance and encouragement in trying out a new idea. They suggest that the children may be given the option not to take part if they wish, with the proviso that anyone not participating may not interfere with those who are. They also suggest that telling the children they can stop the fantasy at any time, should they wish to, just by opening their eyes should help to soothe any fears. However, they also discuss, as does Williams (1983), the issue of whether or not eyes must be closed during a scripted fantasy session. Although it seems that most people can concentrate best on a fantasy with their eyes closed, some children find it unnerving to close their eyes in this situation and it is suggested by Oaklander (1978) that they should be told that they may 'peep' if they want to. This allows all children to feel in control as the fantasy session proceeds.

Williams (1983) suggests that the children should be allowed to lie down in a quiet, comfortable, carpeted room to allow for good relaxation, but Hall et al (1990) discuss their preference for a comfortable upright sitting position with the feet placed flat on the floor and hands in the lap. They suggest avoidance of the
resting position with the head on folded arms on the desk, as this restricts breathing and may be more likely to cause the children to fall asleep.

Once the fantasy session has been introduced and the children are in position, some form of relaxation exercise is suggested by Williams and Hall et al. The relaxation exercise may involve reading a relaxation script, or may be just a short time spent concentrating on breathing.

Glouberman (1989) also points out the necessity for suitable preparation for imagery with regard to both time and place. She advocates a quiet space with no interruptions with an initial period allowed for relaxation. She states that the relaxation time can eventually become shortened as familiarity with the activity develops and the participant can pass easily into a suitable relaxed but alert state.

Rose (1985) asserts that this state of mind facilitates inspiration, fast assimilation of facts and heightened memory and allows a person to contact his/her subconscious. Glouberman believes that allowing images to emerge in the mind is a totally natural process of which everyone is capable and even suggests that we should thank the unconscious for the images that emerge whether or not they are initially welcome images.
Hall et al (1990) describe initial resistance to the technique of scripted fantasy from students in secondary schools who may be uncomfortable with trying something out of the ordinary which conflicts with their preconceived notions of what is and is not acceptable in lesson times. However, they also point out that, while the teacher has the option of stopping a fantasy in the face of resistance, considerable amounts of adverse comments and noise can occur in the room without it spoiling the fantasy for those wishing to take part. Delaney (1988) describes the comments of a child called Rachel in a vertically grouped infant class when she led a scripted fantasy. Rachel did not relax, sat upright and constantly looked around at the other children, interrupting with comments and questions and appearing to panic because she was missing out. However, the other children, although stopping occasionally to answer her questions or even repeat the fantasy leader’s instructions, continued to take part in the fantasy and to gain a lot from it.

Although most adults engaging in scripted fantasy are silent and immobile, Glouberman (1989) suggests that this may be an unnatural way to behave. She says that when an image is fully experienced it fills your whole being and therefore not only the mind is affected. She suggests that the whole body may be used to express the image as it occurs, not just afterwards, moving or making sounds as appropriate to the experience and that this may actually enhance the power of the imagery. She then goes on to suggest the creation of dances or
sculptures as ways of expressing the imagework afterwards which can extend the power and permanence of the insights gained.

Delaney (1988) also describes how children in a group reacted quite actively and noisily to a script, laughing aloud and pointing to the images they could see with their eyes closed. This active, uninhibited reaction to a fantasy is not found by the time secondary school age is reached. Hall et al (1990) suggest this is a result of negative feedback from teachers, who encourage particular kinds of self-controlled behaviour from children in large groups. For older children a high level of involvement is often signalled by requests for more scripted fantasy experience.

Williams pays some attention to the preparation of the fantasy script itself, listing a series of questions which would help in the planning of the lesson and the writing of the script. These involve determining the purpose of the fantasy, the material to be covered, the learning aims and the point of view of the fantasy. As previously mentioned, thought must also be given to the involvement of different senses in the fantasy. She gives some practical hints on the actual reading and pacing of the fantasy and on follow-up activities or what Hall et al term 'processing' the fantasy. This is the stage where the children can reflect on their experience and communicate their ideas and feelings to others. Hall et al, like Glouberman (1989) suggest that reports of experiences may be in the form of
discussion, drawing, writing or even dancing or musical composition. They also report that one important outcome of the use of scripted fantasy in the classroom is the improved quality of discussion afterwards, claiming that processing a fantasy motivates even children who rarely volunteer any comment in class discussions to put forward some contribution, and that length and quality of discussion is increased, with each contributor feeling valued as others listen interestedly.

A similar improvement in quality of art-work is found following a scripted fantasy. Hall et al suggest that those children who normally lack confidence in their ability to produce a drawing or painting and so often resort to copying others, feel no such need following a scripted fantasy, as their own personal experience gives them their motivation and inspiration. They report that many teachers have found the quality of children's art work is much improved following a scripted fantasy. They also found that children were really interested in looking at others' work as well as their own.

Hall et al (1990) point out that giving the children a wide choice of sizes and types of paper and a choice of drawing materials so they can convey their feelings through the most appropriate media results in higher quality work. Having the materials ready results in less disruption to the flow of ideas and feelings. If, after a fantasy, the children are asked to draw something from their experience
and then the drawing is discussed with the child, the resulting discussion is often of higher quality than would be obtained without the focus of the drawing.

A third improvement is found in the ability of children to remember the content of their fantasies. Hall et al link this to the degree of involvement of the child in the fantasy and to the vividness of the imagery. The memorability factor can be deliberately utilised in scripted fantasies which contain, for example, technical terms, or explain a particular process. The personal involvement of the child in the imagery seems to be the facilitating factor in the commitment of the facts to memory.

A fourth positive outcome of scripted fantasy noted by Hall et al (1990) is concerned with writing about the fantasy experience. 'Writing up' activities is a common processing tool in the classroom. Teachers are always concerned about motivation to write, as otherwise a writing activity can become a chore which the children feel forced to do. Hall et al (1990) describe an eagerness to write about the fantasy experience which may exceed that usually evident in writing sessions. They also describe how the children tend, when writing about their own fantasy experience, to use more complex language and to write more sensitively about feelings. They suggest that the children should be encouraged to write in the first person and in the present tense as this allows for a more immediate 'reliving' of the experience and reflection upon it. Writing about a scripted fantasy is a very
personal experience and because of this the teacher needs to be very sensitive to the child's feelings when assessing the quality of the writing. As previously described, the child must feel confident that the content of his/her writing will be accepted without ridicule or criticism or (s)he will feel unable to commit his/her feelings and experiences to paper.

Yet another possible positive aspect of fantasy described by Hall et al (1990) is that of a potential calming effect of a suitable scripted fantasy and an associated increase in co-operation engendered. However, Williams (1983) discusses the need for teachers to be sensitive to the possible effects of fantasy on children who may be emotionally unstable or who may have problems of which the teacher is unaware. She suggests that initially fantasy scripts chosen should be non-threatening and unlikely to evoke extremely strong emotions and that the teacher should always observe carefully and talk with the children afterwards to assess the effects of fantasy.

Hall et al (1990) and Williams (1983) describe the use of scripted fantasy mainly with adolescents and adults, but suggest that it is also suitable for use with younger children. Delaney (1988) introduced scripted fantasy to infants and nursery aged children with positive results. She found that although few scripts are available for use with very young children, they were happy to be presented with the same script on several occasions, each time exhibiting interest and
involvement. She also found that scripts with a surreal element, for example, some found in De Mille (1976) were extremely effective.

I decided that, in the time available for this research, I would concentrate on only one focus for scripted fantasy and that would be to evaluate its effects on the quality of language work it produced. My next step was to decide upon the research design.
Chapter 4. The research - its design and implementation.

In planning this research into the possibilities and effect of deliberately introducing activities associated with right brain thinking and learning into my classroom, i.e. scripted fantasy work and activities to help enhance self-esteem and develop positive interpersonal relations, I decided to adopt a 'new paradigm' research approach. Reason and Rowan (1981) suggest that new paradigm research is a synthesis of naive inquiry, which they believe is prone to the error of researcher's biases and prejudices as it is very subjective, and orthodox research, which they say isolates subjects from their normal, social context and eliminates real life by conducting research which studies variables rather than whole people or groups. They assert that the old paradigm emphasis on numerical data and precise measurement is limited in its usefulness, saying that

'Orthodox research produces results which are statistically significant but humanly insignificant; in human inquiry it is much better to be deeply interesting than accurately boring.' (Reason and Rowan 1981, p xiv)

This new paradigm research, they say, is 'subjectively objective'. The method chosen for this research involved the children and myself working together to try out the new activities to find what happened. Thus this was a form of action research. Marrow advocated 'the idea of studying things through changing them and seeing the effect,' and said that

'in order to gain insight into a process one must create a change and then observe its variable effect...' (Marrow 1969 cited in Reason and Rowan 1981, p174)
Deutsch (1969) stated that the need for knowledge of the effect of experiences upon development as a basis for changes in policies 'clearly points to an emphasis on action programs and action research...' and Sanford (in Reason and Rowan, 1981) was convinced from his survey of the work of a number of researchers that 'much can be learned from studying the effects of actions.'

This research took the form of 'co-operative inquiry'. In traditional research methods of the 'old paradigm' the researcher interacts with the subjects in ways that keep the subjects ignorant of the research propositions and allow the subjects no contribution to the research right from initial hypothesis-making through to the final conclusions. Thus the researcher performs the research 'on' the subjects. In the classroom it is impossible to separate the teaching from the learning situation or the teacher from the children, so a co-operative inquiry approach is much more appropriate. In co-operative inquiry the researcher performs the research 'with' the subjects. Heron (in Reason and Rowan 1981) discusses co-operative inquiry saying that the contribution of the subject may be strong, if the subject is co-researcher and contributes to creative thinking at all stages, or weak, if the subject merely is informed of what is going on at all stages and given the opportunity to dissent and negotiate with the researcher. Heron asserts that, in the most complete form of this approach the subjects act as co-researchers and the researcher as co-subject, all participating in the action and experience to be researched.
In this research the children in my class and I worked together in trying out some activities which were new to all of us and reflected on and discussed our experiences. Heron has argued the importance of discussion between researcher and subjects in order to ensure the best possible understanding of what is happening, to avoid the situation where the researcher may totally misconstrue the subjects' behaviours and thinking.

Before starting this research in my classroom I was very apprehensive as to how it might proceed. My class was new to me in September 1994 and for that term, i.e. until December consisted of only eleven children. Four of these children had passed their fifth birthday but had remained in the Reception class in order to have more Reception type experience as they had progressed only slowly with their school work during their previous year and it was felt that they would benefit from the extra teacher attention they would receive as part of such a small group. The remaining seven children were new starters at school who would reach their fifth birthday at some time between starting school in September and the end of the following February. They had had some previous experience of school by attending our pre-school group for two sessions a week before starting school full-time. These new intake children were almost completely 'unknown quantities' to me and the four older children were already in danger of perceiving themselves as failures in the school setting.
I was very aware of my responsibility as Reception class teacher to facilitate the new intake children's settling into school life in such a way that they should develop positive attitudes towards other classmates and towards their work. I felt the added responsibility of turning around the attitudes and self perceptions of the four older children away from their negative ideas to more positive ones. I decided to introduce activities designed to help each child to develop his/her own positive self-concept, to help the children to interact with each other in positive ways and to develop good interpersonal relationships with all others in the classroom and the wider school situation. These activities were to be carried out during the Autumn term.

There are many activities which may be used to develop positive self concepts in the children and to encourage good interpersonal relations. Borba and Borba (1978,1982), Lloyd (1990) and Canfield and Wells (1976) have described literally hundreds of activities suitable for use in primary schools with these aims in mind. Caldecott, Durbin and Siner of the Cheshire County Psychological service have recently (1993) published and distributed to schools a collection of activities to encourage co-operation in the primary school and there has also been a great deal of attention given in this decade to the possibilities of the use of 'circle time' in schools as described by Mosley (1991,1992) and Curry and Bromfield (1994) to enhance self esteem and promote positive behaviour. They suggest that sitting in a circle helps the children to concentrate on the specific idea or concept
designated for discussion and creates a feeling of unity and support among the children as well as between the children and their teacher.

Kline (1988) also describes some activities suitable for circle times which allow people to pay and accept positive comments about each other without embarrassment. He also suggests activities designed to help in the resolution of conflicts, asserting that co-operation is better than competition in school. Mosley (1991, 1992) encourages the use of circle time to develop 'golden rules' for behaviour within the class which foster positive self concepts and positive interpersonal relations. Borba and Borba and Mosley suggest that accepting non-participation in circle time allows insecure children time to develop confidence to participate at their own rate.

Frey and Carlock (1989) discuss the use of the skill of self-disclosure which helps to make an individual known and closer to others. Through self-disclosure people reveal their feelings and open themselves to response and allow themselves to discover how they are like and different from others. In circle time the children are encouraged to speak freely in an accepting and supportive atmosphere. These periods of self disclosure help bond the children together as a group and enhance mental health. (Jourard, 1971)
Another skill which can be developed through circle time activities is that of giving 'strokes'. A stroke is any positive, affirming verbal or non-verbal message. Wycoff (1977) found that people feel much more able to complain about or criticize other people than to express positive feelings to them and also that people often find it difficult to accept positive feedback from others or from themselves. Practising giving and receiving strokes during circle time allows participants to develop their self esteem and their interpersonal skills.

Role play can be used to let children work out a variety of solutions to their problems and gives them the chance to compare solutions to decide upon the best one. The children can learn to put themselves in the place of someone else and to develop their powers of decision making. They begin to see that they are responsible for their own behaviour and can affect other people's behaviour. Borba and Borba (1982) discuss the use of stories to stimulate thought and discussion about feelings. Identifying with characters in stories helps a child to realise that other people experience the same feelings that (s)he has and may help the child to cope with problems encountered in stories when they occur in real life at some later stage.

The activities chosen to help develop positive self concepts and positive interpersonal relationships within school fell into three areas, the first concentrating on preparation for initial entry to school, the second on general
ways of speaking and relating to each other throughout the school day and the third on specific activities carried out in 'circle time' some of which were followed up with other related activities.

**Preparation for entry into my class.**

Before the children were due to start school in September I wrote a personal letter to each child as a home-school link device. Such a letter is suggested by Borba and Borba (1978, p11) to

> 'lay the groundwork early for feelings of specialness that can contribute to building a positive self-image.'

In this letter I introduced myself to the child, mentioned some of the exciting activities (s)he would be able to do in school and the fact that there would be some other children to play with there. The tone of the letter was positive and welcoming and ended by saying how much I was looking forward to seeing them in their smart uniforms in our line in the school playground at nine o'clock on the first day.

I had met most of the new intake children previously when they were in our preschool but felt that since the children did not know me well a reminder of my name would, perhaps, make me more real to them as a person. I felt that describing the pleasant things that would happen at school would help to promote a positive attitude to starting school, allaying fear of the unknown and hopefully
helping to counteract the negative comments of some parents who had been heard to use school and teachers as a threat to a misbehaving child, saying for example,

'Wait until you get to school. You'll be in trouble with the teacher if you do that,'

or just

'I'll tell the teacher!'

said in a tone of voice designed to inculcate fear of an ogre in the mind of any child. I felt that fixing the date and time and place of our initial meeting would allow the child to feel sure (s)he was doing the 'right thing' and encourage self confidence.

The letter was written, addressed and posted to the child him/herself with the aim of increasing the child's feeling of self-importance by his/her receiving a personal letter through the post from his/her new teacher. The letter could be shown to friends and relations and positive comments would again help the child to feel important. All previous contact conveying information about the child's starting school had been with the parents. It was not known how much, if any, of this information was ever discussed with the child.

Although the four older children had been in school before there was a possibility that their school experiences had sometimes been less than pleasant and also they had had little contact with me as I had taught the previous year in a mobile classroom while their class had been in the main building. Thus I believed the
contact letter would be useful for them too. In their letter I also requested their help in looking after the new intake children. This was designed to engender a feeling of self-worth as they were being acknowledged to be competent, knowledgeable pupils who had something of worth to offer the teacher and their classmates.

The feedback I received about these letters was copious and all very positive. Every parent used the letter to introduce me to her child when I met them in the line on their first day in school, making comments such as,

'This is your teacher, Mrs Dukes, who sent you the letter'.

Some parents discussed the letters with me, commenting on the child’s pleasure and excitement at receiving a letter of his/her own, saying how they had shown it to grandma and/or other relations. They thanked me for taking the time to write and said they really appreciated the letter which was to them a new idea. Thus, the letters, which appeared in the parents' opinions to have been successful in achieving at least some of their original aims, had the added benefit of making closer links between the parents and myself by providing an opener to conversation.

Later, in the classroom, the children talked to me about their letters and it was obvious that they had been pleased and proud to receive a letter of their own. Again, this was a good conversation starter as we all had something in common
to discuss. As an immediate follow-up to the letter I introduced the two groups of children to each other, discussing the ways in which the new intake children might need to ask for help, for example, in finding their way to the toilets and back to the classroom etc., and how the older children would be able to give the appropriate support and assistance to help them to settle in. The older children were very eager to offer help to the others and at first my biggest problem was stopping over-enthusiastic helpers from rushing to form escorts of two or more to guide one younger child to his/her destination. This helped the older children to start to build positive self concepts in the area of 'the social self' (as described by Borba and Borba 1982) as they interacted with the younger children and their perception that I, as their teacher, viewed them as worth while, competent people also helped to shape their attitudes about themselves (as described by Coopersmith 1967). I felt that sending the letters was a very valuable exercise and one well worth repeating for future intakes of children, even though it was rather time-consuming writing the individual letters by hand.

Ways of speaking and relating to each other.

The second area on which I focused was that of ways of speaking to each other during the school day. In this area I deliberately modelled certain ways of relating to others and openly invited the children to follow suit. Although I had previously been aware of the importance of praise and of encouraging positive attitudes I had hitherto neither pointed out what I was doing nor asked the
children to behave in similar ways, so this was a change in my normal way of working in the classroom. The children were asked to be co-researchers as their feelings and opinions were sought and discussed on a day to day basis as well as discussing with them how I felt things were progressing.

I wanted the children to start to notice positive things, not only about themselves but also about other people. I wanted them to develop a healthy pride in themselves and their abilities and to look for and comment upon similar aspects in others. I also wanted them to be able to accept compliments and positive comments from others without embarrassment. In order to work towards this I began to make a conscious effort to model such behaviour, complimenting children on their behaviour, appearance and work saying, for example, 'Stephen, I really like the way you have tried to colour carefully, keeping inside the lines.' I would then draw the attention of other nearby children by saying 'Look at Stephen's lovely work, everybody. I do like the way he's tried to colour neatly.' Within a very short space of time the children began to point out to me good points about their own appearance, behaviour and work and I reinforced this by giving positive feedback and telling them how happy I felt to hear about such good things. I felt that once the children were relaxed and confident to give me the good news of their own successes it was time to talk to them about their feelings and to encourage them to extend this behaviour to encompass other children in the class and their activities.
Sitting together talking in a group I asked the children about their feelings when I gave them compliments or praised their work. They were able, once given concrete examples of positive comments I had given to them, to talk about how these comments made them feel, speaking with their restricted vocabulary of feeling 'happy' and 'nice' and perhaps more poetically of having a 'warm tummy'. I told them how I felt when anyone complimented me and suggested that they might look out for opportunities to compliment each other and asked that they draw my attention to them as well. In the days that followed there was a rapid 'snowballing' effect as one or two children began to compliment their classmates and me on various achievements and others began to emulate them. I always thanked children for their compliments (which were at first mainly simple comments about my appearance, for example, 'I like your earrings,' but which later also included achievements such as my drawings on the board) and again the children in my class began to copy this. Because the children were invited to tell me about the good things they noticed about other people and their work, this allowed me to add my compliments to those of the child and in addition to praise him/her for noticing. The atmosphere in the classroom and the interaction between children became, over the weeks, considerably more positive than I had ever experienced before, with a definite reduction in the number of complaints to me from the children about each other.
Another area in which I was particularly interested was that of encouraging children to take risks in putting forward ideas. I am aware from personal experience that lack of self confidence often prevents children (and adults) from suggesting ideas in case they are wrong and other people laugh at them. I believe that my own difficulties in this area arose perhaps from a combination of a perceived pressure to 'prove myself' when following in the footsteps of an academically extremely successful older sister and brother and, because I too was academically very successful, too few experiences of 'failure' as a child so that I lacked opportunities to learn how to cope with such everyday occurrences without feeling that it was 'the end of the world.' Even as an adult, although my intellectual self accepts that I need not always be perfect, my emotional self is still not yet quite so accommodating.

As well as trying to help children to develop a positive self concept in the variety of ways discussed elsewhere in this paper, I included in my planning particular activities designed to allow for guessing and predicting, where all answers and suggestions, however unlikely, would be acceptable, so that fear of speaking out in front of others would be reduced. Such activities included predicting what might happen next when sharing a book at storytime. As no one could know, in a book new to them, what was going to happen next all suggestions were equally valid and acceptable. Composing a class story, where the children took it in turns to add a little more of the narrative was also used to encourage participation of
all where imagination could be freely employed and both common-place and fantastic events were equally possible.

At the start of a lesson, guessing about facts which would later be revealed during the lesson was another method, suggested by Lloyd (1990), which I employed to encourage the children to take small risks. The children were not told which suggestions, if any, were correct but were allowed to find out for themselves as the lesson progressed. This also served to raise the children's awareness of what points to look out for and so aided motivation to take part in the lesson. In this exercise the children were praised for taking part, rather than for getting the right answer.

Circle time and follow-up activities.

The value of circle time has been described by a number of authors, (for example, Mosley (1991, 1992, 1993), Curry and Bromfield (1994) and Caldecott, Durbin and Siner (1993).

The Elton Report suggested that

*teachers' group management skills are probably the single most important factor in achieving good standards of classroom behaviour.* (D.E.S.1989, cited in Mosley 1992, p4)

Mosley's circle time is a group work approach which aims to give practical help to teachers in this area working with the whole class together.
The Alexander Report highlighted some benefits of a group work approach pointing out that it

'fosters the social development which primary schools rightly believe to be an essential part of their task and above all, provides for pupils to interact with each other and their teacher.' (D.E.S. 1992, p29)

My traditional, daily 'news-time' sessions had consisted of my class of children sitting on the carpet facing me and putting up their hands to indicate a wish to tell some news or show and talk about an item they had brought to school. A child would then be chosen to take a turn coming to stand by me to speak. This would work well for a while, but children had to be discouraged from shouting out or not listening to each other and the session could only last a few minutes before attention loss rendered continuation impossible. Inevitably, despite my good intentions to the contrary, the most forceful and vociferous would be most likely to dominate the session and more timid children were less likely to offer to speak and less likely to be listened to when they did, enduring frequent interruptions from more confident peers. Having observed several circle-time sessions with class groups of various different ages ranging from Reception to Year 6 in inservice training sessions I felt confident that I would be able to organise and lead such sessions with my children.

The more structured approach of circle time offered a way to combat previous difficulties and to improve 'news-time' sessions in several ways. Firstly, simply sitting in a circle helped us all to be able to see and hear each other better without
the need for children to scramble over others to reach the front of the class. Secondly, as no-one was sitting at the front or at the back of the group, potentially all could feel themselves to be of equal status in the group. Next, because it had been explained that all the group members were entitled to speak in turn, this helped to stop children interrupting and vying for attention as they all knew that their turn would definitely come eventually. This allowed children to concentrate on what others were saying without being anxious about making sure they would be noticed and allowed to speak.

Mosley (1991) suggests that when children perceive the teacher to be the figure of authority who is there to exercise control over them they may abdicate the responsibility of 'owning' their own behaviour and may therefore not develop self-control, self confidence or self esteem. She goes on to assert that 'circle-time', with the teacher being part of the circle and participating as part of the group, allows children to participate as 'partners in the process of developing responsibility for their own behaviour and learning.' (Mosley 1991, p11)

Potentially circle time allows every child to experience success and to feel of equal importance to others in the group as everyone listens to what (s)he has to say. However, no member of the group is made to feel threatened by the activity as it is acceptable to 'pass' if one has nothing to say at that time.
When I altered the format of my 'news-time' sessions I experienced an immediate, definite improvement. The previous competitiveness gave way to a much more co-operative approach in the sessions and led to all children having the opportunity to speak and be really listened to, rather than just heard by the others. A few reminders to wait for their turn to speak were required from time to time for group members who forgot the 'rule' of circle time but the frequency of the necessity for these reminders reduced over the weeks.

In our earliest sessions we played simple games which helped the children to get to know the 'rules' of circle time as described by Mosley (1991) - taking it in turns to speak, listening to others, 'passing' if desired. We used a small teddy as our 'speaking bear'. Holding the bear entitled one to speak. Our first game helped us to get to know each other's names by simply saying 'My name is...'. The second reinforced this by first thanking our neighbour for the bear. 'Thank you... My name is...'. In subsequent circle times we told more about ourselves, for example, 'I like...', 'I'm good at...' etc. These activities introduced and helped to reinforce the idea that we are all individuals, we are all different but all special in our own way. They also gave the children the opportunity to get to know everyone else in the class so that more diffuse friendship patterns were encouraged. This allowed individual children to feel more secure and accepted in all classroom situations. The children were able to work and play happily in any
groupings and there was no sign of excessive dependence of one child on another particular classmate for support as often happens in school.

A variety of follow-up activities were used to extend these ideas. To encourage children to notice both similarities and differences in appearances between themselves and others they were asked to paint a portrait of a partner. The nursery nurse classroom assistant worked with three pairs of children at a time, encouraging them to observe carefully and helping them to record their observations in their paintings. Throughout this activity she discussed with the children similarities and differences in appearance between the partners and in the group as a whole and stressed the value of the differences in making us all special, interesting individuals. Later the pair of children were asked to show their paintings to the group and each child pointed out one similarity and one difference between him/herself and his/her partner.

A second activity which arose from one week's circle time discussions was making 'I can' books. We started by thinking about what babies can do. This was within the children's experience as many had younger brothers and sisters to use as examples. We then went on to talk about how much the children had changed since they were born. Deliberately bringing to mind all the things they had learned to do helped to 'strengthen each child's sense of accomplishment and self-worth' (Borba and Borba 1978, p32). Realisation that they were successful
learners helped to give them a positive attitude towards new tasks and their smiles demonstrated their enjoyment in the celebration of their achievement. McClelland et al (1953) discuss these ideas in terms of the fulfilment of our 'achievement needs' saying that frustration of these needs leads to feelings of inadequacy and reduction of interest in learning. I believe that the Year 1 children's perception of themselves, which had previously been negative as failures in the school situation, began to improve as they recognised their own achievements to date and realised they were, after all, capable of learning. This was evidenced by their increased motivation to attempt tasks and their obvious pleasure in their performance in the classroom. The children then each produced their own little book of illustrations with captions all starting 'I can...'. They could then read their books to me, to other children and to their parents, each reading and the positive responses to it reinforcing the affirmation of their self-worth.

The next two weeks' circle time sessions were based around the theme 'I like..'. These were designed to foster each child's sense of individuality while simultaneously raising awareness that others share many of our experiences and attitudes. Again these sessions helped the children and me to get to know each other better and to develop a stronger group identity, thus improving the sense of belonging, helping to satisfy 'affiliation and affection needs' as described by McClelland et al (1953) and Maslow's (1970) 'belongingness and love needs'.
The positive accepting nature of the circle time session with all contributions being valued helped to ensure that the children's 'power needs' were being met, as feelings of being 'put down' or ignored lead to anxiety which in turn reduces the self-esteem and co-operation and motivation levels. (McClelland et al 1953)

At each session we discussed a particular area of liking, for example, favourite food, favourite toy, favourite activity at school, favourite activity at home, and each of these was followed up by making a page for an 'I like...' book which could then be kept and read with the attendant benefits described earlier.

Having carried out these introductory activities I felt that the children had had enough practice at the circle time way of contributing to discussion and were comfortable enough with each other and with me to attempt some circle time work on feelings. Again these sessions allowed us to gain a deeper understanding of each other and the children to become more aware that others experience similar feeling to themselves. It also paved the way for later circle times which were used for problem solving, as it introduced language available to describe feelings. This also empowered the children to begin to articulate negative feelings rather than just lashing out as a first reaction to events, which had hitherto been the normal way school starters behaved.

The circle time sessions focused upon such statements as 'I feel happy when...', 'I feel sad when...', 'I feel silly when...', 'I feel angry when...', 'I feel scared
when...', 'I feel proud when...' and culminated in an 'I'm glad I'm me because...' session. These sentence starters are suggested by Borba and Borba (1978, p35) for circle time discussion and for prompts for book making. They also suggest the use of children's story books as starting points for further discussion on feelings and I have found this a useful exercise. This approach also allows children to gain some insight into feelings and situations not yet encountered by themselves so that they have some experience to draw upon when necessary at some time in the future.

The activities described so far have all focused on raising individual children's self-esteem and helping them to identify with and feel comfortable with other members of the group. Over the weeks these activities were carried out I was aware that the classroom climate became more calm and supportive more quickly than I had previously experienced. Children in our intake area had tended to be particularly aggressive towards each other, the explicit instructions of many of the parents being 'if he hits you, hit him back harder', and occasionally, 'make sure you hit him first.' A great deal of teacher time and effort was used in sorting out problems with inter-personal relationships by reacting to and dealing with incidents as they arose. I felt that the circle time sessions and follow up activities had worked to some extent as 'preventative measures' rather than as 'cures' and that their benefit was noticeable from the start, but that it increased as time went
on. The children were more relaxed with each other and there was generally less friction in the classroom and in the playground than previously had been the case.

Our next set of activities was aimed at improving relationships between children in the class by encouraging them to think about friendship. We started with a circle time session where we thought about a particular friend and the sort of things (s)he does that makes us want to have him/her for a friend. The children thought of such statements as 'My friend plays with me', 'My friend calls for me to play out', 'My friend takes me to the teacher when I fall over', 'My friend shares her sweets with me', etc. Every child was happy to contribute something to the discussion, even if the contribution was a repeat of a statement made earlier by someone else.

We then went on to play a game adapted from one suggested by Borba and Borba in their chapter on concept circles called 'The Way to be Friendly' (1978, p56). A set of sentences describing everyday events in school and at home were printed on separate cards. These were placed face down in the centre of the circle at circle-time and the children took it in turns to choose a card. Since the children were new starters to school and unable to read as yet, they brought the card to me to be read out loud. The children then had no trouble in deciding which statements described friendly actions which the child then placed in 'the friendly box'. Statements describing unfriendly actions were thrown in the bin as being
unsuitable for our class. The child then returned to his/her place and the next child took a turn. The sentences used were of the type

'Someone pushes you over in the playground.'

'Someone smiles at you.'

'Someone asks you to play.'

'Someone helps you pick up the crayons you dropped.'

At our next session we brainstormed the ways we knew of being friendly and made a sign for each of these to be put up on the wall as reminders. The list we compiled consisted of just six main points:

Friends.... play with you

    say kind things to you

    smile at you

    share things with you

    help you

    take care of you

The children all agreed that these behaviours made the recipient feel happy and therefore should be promoted in the classroom and elsewhere in school. We decided to look out for and report these sorts of behaviour in the future to see if we were really doing what we agreed we should try to do.
As a follow-up to this session I put up on the wall a cut-out of a large tree with no leaves on it. I also cut out a large number of sycamore shaped leaves in various autumn colours. This was to be our 'friendly deeds tree' which was to be a visual display of our progress in performing friendly deeds for each other. This activity was a variation of 'The Friendly Box' activity suggested by Borba and Borba (1978 p57). I encouraged the children to tell me whenever someone did a friendly deed for them, starting it off by telling the children something I had noticed a child do. I then wrote the deed on a leaf, for example, 'Jennifer held the door open,' and the child who had done the friendly deed was allowed to 'blu-tak' the leaf on to the tree. The tree was soon covered in beautiful autumn leaves and the children were proud to point out and count all the leaves with their names on and to 'read' what they had done. Instead of the previously seemingly endless queues of children telling tales of bad things other children had done, the emphasis swung the opposite way with children desperate to tell me of the kind deeds others had done for them. The atmosphere in the classroom improved markedly within a few days. In fact the effects of the tree were little short of amazing to me. At this time the mid-day assistant, who supervised my class at lunch time each day and reported back to me at the start of each afternoon session about the children's behaviour, asked me to explain what our friendly deeds tree was. She became very involved in what I was trying to do, encouraging the children by telling me about friendly deeds the children had done for her and each other at lunch time so that more leaves could go up on the tree. She also helped
by checking the tree daily to see which new leaves had appeared and praising the children for their actions. At first the children tended to repeat the same 'good tales' eg. '(s)he played with me,' but as we thought about our list of possible friendly deeds the variety of actions noted on leaves increased considerably. Some children also invited their parents in to see their names on the tree and to explain this to them. Praise from the parents then reinforced the desire to reappear on the tree and even more definite attempts were made to be kind and friendly. The project gathered more momentum daily and within a month unfriendly actions dwindled to a mere trickle of rare occurrences.

Since the time was approaching for our class to take the assembly in front of the whole school I decided to use our work on friendship as the theme. During the assembly the children held up paintings they had done showing how friends behave and told everyone what the painting was about. I then explained to everyone about our 'friendly deeds tree' which we had transported to the hall to display there. The children in my class were thrilled that their friendly behaviour was being celebrated in front of such a large audience.

At this point we again discussed the sorts of things that friends do and we decided to embark upon making cards, drawing pictures and writing letters, in the children's own emergent writing, to friends in the class. After an introductory session with groups of children in the class, materials were made available at all
times in the classroom and the children could choose this activity. Recipients could keep the letter or card or picture in their tray, take it home or put it on display on the cupboard door in the classroom for others to see and enjoy. It was noticeable that all children received these messages from others and no-one was left out at all. Also there was as much enjoyment in making the messages as there was in receiving one.

During the term when the children had become familiar and comfortable with the circle-time approach and with each other, I was able to use this format in addressing problems which arose from time to time eg. when a child had been upset at playtime because someone took their ball from them. I introduced the circle-time by saying that we had had a problem and that we were going to talk about it to see what we could do to prevent a recurrence in the future. Thus all the children were invited to share ownership of the problem and its solution rather than being admonished and told what to do in the future. For some problems the inclusion of role play seemed to occur naturally as children demonstrated their suggestions of alternative ways of behaving. At all stages we were able to talk about the feelings of the participants in the events and eventually to come to a unanimous decision about future behaviour. It was gratifying to notice that, even at such a young age, the children were able to empathise and were really beginning to understand the importance of valuing and considering the feelings of others, rather than just oneself.
Scripted fantasy and follow-up activities.

Having read about scripted-fantasy and the value ascribed to it by its advocates, I felt that I wanted my children to try out this way of thinking and hopefully gain the benefits it was said to carry with it. However, not having had any personal experience of the technique, either as a participant or as an observer, I was extremely apprehensive about attempting to introduce this in my classroom with my children. Fears surfaced each time I began to think about planning a scripted fantasy. Would I be able to carry out such a session with my class? Was it really worth trying in the light of their youth and extremely short attention spans? With all the pressures of work to be done in school and so little time to fit it all in, would this be a waste of time which should be spent on something else? Since I had been teaching apparently successfully for some twenty four years would it not be more sensible to stick to 'tried and tested' methods? Perhaps my greatest worry was, would I lose control of the children if I attempted such a session? Because of these fears I repeatedly delayed any attempts at scripted fantasy for some weeks.

There were also some more practical problems to overcome. Firstly, all the published materials I could find were designed for adults or adolescents and so these would need to be greatly adapted or completely new ones would have to be written to suit the age of my children. Although Williams (1983) makes many suggestions to help with the preparation and delivery of a script, I was,
nevertheless, rather worried that I might possibly misinterpret these suggestions and produce an unsuitable script or poor delivery which would then lead to a conclusion that scripted fantasy is not valid for young children, when really any poor reactions would be my fault and it would not be a fair trial of the technique. So much seemed to depend on my getting everything right.

A second practical problem was that of providing good physical conditions for a scripted fantasy session. All advocates suggest a peaceful, quiet setting with no interruptions and this is extremely difficult if not impossible to arrange in an open-plan designed school such as ours, where extraneous noise from neighbouring teaching areas is a fact of life.

The best I could manage was to assemble our group in our 'home-bay' which is separated from the main teaching area by curtains. I also arranged a time when one of the neighbouring classes had gone to the hall for a P.E. lesson which cut down the chance of noise from outside the group and also reduced any potential 'audience' for the session. My worry that I might lose credibility in the eyes of colleagues and pupils if I lost control of the group was never far from the surface of my consciousness. The fact that I was relatively new to the school and in the position of Deputy Head and Head of Infants increased the pressure I felt to avoid failure in the sight of others. The children were, to some extent, already used to
the necessity to focus in on what I was saying and ignore background noise so I was hopeful that we would be able to manage.

Eventually, about four weeks into the term, I took my courage in both hands and planned and implemented a scripted fantasy about a visit to the park. I chose this as a framework as all the children would have had some experience of an outing to the park as a starting point. When planning the script I followed Williams's (1983) advice and tried to include opportunities for the use of a variety of senses including sight, smell, hearing, feeling, tasting and balance and movement. After an initial short settling down and relaxing period the scripted fantasy progressed along the following outline. The child is in the park surrounded by trees with the autumn leaves in drifts on the ground. Following play in the leaves the child spots and goes to meet a friend, sees the playground equipment and goes to play on it with the friend, parts with the friend, feels hungry and finds something to eat in his/her pocket, eats it, mum comes and says something and then they leave the park.

One difficulty I had not foreseen was that as I was leading the fantasy I tended to go into it with the children and I had to make a conscious effort to stay outside the fantasy and concentrate on the script and how the children were reacting to it.
As the fantasy proceeded I noticed that the children did not sit still and quiet, experiencing all the fantasy within their minds, but rather every part of them was included in the procedure. Most of the children kept their eyes closed and sat in one place, but there was a great deal of body movement as they appeared to 'act out' what they were thinking, feeling in their pockets, licking their lips and making smelling and tasting actions and sounds. They waved to their friend and at appropriate times appeared to be listening to sounds and voices within the fantasy. They also spoke aloud at times and although I expected this to disturb other children it did not do so. Every child but one remained engaged in his/her own thoughts and feelings and totally ignored the other children and their words and actions. I found this very surprising, although I was aware of Delaney's (1988) experience of some similar reactions in young children, which went some way towards reassuring me that all was well in spite of the noise and movement. Glouberman's (1989) work on imagery also pointed out that immobility and outward silence is probably an unnatural way to respond to a scripted fantasy and that whole body expression is probably preferable. However, I confess to amazement that my children could behave with such outward demonstrations of involvement while remaining totally engrossed in their inner imaginings. The one child, Joanne, who did not enter into the fantasy but looked around at the others and crawled around was one of the youngest in the group who was only four and a half years old and who had special needs, particularly in the area of language development. Joanne's receptive language was poorly developed and I believe
this could explain her lack of involvement as she probably had little understanding of the script, although it was at an appropriate level for her classmates. At that time I was observing Joanne's behaviour in the classroom and trying to establish exactly where her difficulties lay.

As a follow-up activity to this fantasy I asked the children to draw a picture of what they had experienced and they settled immediately to the task with good concentration. While they were drawing I talked to each child in turn, asking them to tell me about their picture and I scribed their responses for them. The results were quite startling for me. Whereas previously I had had reasonably detailed attempts by a few children to retell a story such as 'Little Red Riding Hood' and from others a sentence or two and had had extremely limited responses or silence when children were asked to think of something of their own to say such as telling news, the children were now full of ideas, telling me about the details of their drawings. Some of them did retell the scripted fantasy outline as a story in the present tense but added a great deal to it, employing descriptive language, including feelings experienced and explaining reasons for events. Much more creativity was evident than I had experienced previously with either these particular children or any other children in this school at this stage of their school career, and there was evidence of much more imaginative and higher quality language usage. It was as if a tap had been turned allowing previously pent-up language to flow in a torrent! Only Joanne seemed unable to remember anything
at all about the fantasy. She was unable to draw anything recognisable and could not tell me anything about what she had drawn, so I had no way of knowing whether or not her drawing was related in any way to the scripted fantasy experience.

After all my previous fears to the contrary, the first scripted fantasy session seemed to me to be an obvious success. The children had appeared to enjoy the session at the time and afterwards confirmed this when we discussed their feelings about the experience. As described earlier, the quality of the language and art work produced after the event was higher than I previously experienced with this group of children. I believe that in at least one way the children's very young age was a favourable factor as they were relatively new to school and were constantly having novel experiences and so were very accepting of this new way of behaving. Older children with more pre-conceived ideas of what school is about might well have had greater difficulty in accepting and entering into such an alien experience.

Following this extremely successful first attempt at scripted fantasy. I felt much more positive about the planning of a second such experience. Since it was soon to be November 5th I decided to adapt the script for Bonfire Night provided by Hall et al (1990) to make it more appropriate for my children. Since I believed that they required some previous experiences as a basis for a fantasy I decided to
wait until after Bonfire Night as the experiences of the previous year were so long ago as to probably be completely forgotten by the children. Later I was to question this decision and the assumption on which it was based. I felt that the Bonfire Night fantasy should work well as it included every sense in a potentially exciting way. The children greeted the preparations for a second scripted fantasy experience with obvious pleasure and positive anticipation. After a quiet settling down introduction to the session I guided the children through the steps of the fantasy and observed their reactions. This time I noticed far less movement or overt reactions of any kind. There was less gross movement, less fine muscle movement and much less talking. Whatever was happening was doing so inside the children's minds and apart from occasional facial expressions of pleasure or surprise and the clapping of hands over ears there was little outward evidence that the children were really actively engaged in the fantasy. This contrast to the behaviour observed during the park fantasy surprised me somewhat and at this stage I felt rather disappointed with the results of my efforts.

Following the fantasy session I immediately provided drawing and colouring materials so that the children could transfer their experience on to paper as permanent evidence. This time the drawings were again quite detailed and there was evidence of movement and colour in them. All the people portrayed wore enormous smiles and were evidently enjoying their experiences. This time
Joanne's offering was not a recognisable picture as the others' were, but was an abstract pattern of bright colours.

Rather than just scribing for the children I asked them to 'have a go' at writing about their experience for themselves using their own 'emergent writing' skills. I then asked each child to 'read' to me what they had written. I was interested to hear from several children a recurring theme of feeling worried about getting burned or hurt by the bonfire or fireworks. Nothing in the script had remotely suggested such a thing but this anxiety was obviously shared by several children. What I had thought would be an exciting and pleasurable fantasy experience for the children had not perhaps been completely so. I was relieved to find that the children had all imagined themselves safe in the fantasy and I am sure that a healthy respect for danger is acceptable and to be encouraged. However, the experience was a warning to me to think even more carefully about the possible interpretations of a scripted fantasy before using it with young children.

Although the art work produced following the fantasy was very exciting and effective, after the unqualified success of the previous fantasy I was rather disappointed with the accompanying language work. I had expected to hear wonderfully descriptive language but instead the children tended to describe what they were doing and what was happening in their picture in very mundane terms. Adjectives describing the fireworks were mainly limited to such uninspired words.
as 'nice' and 'round' and 'square' with the most imaginative being 'whizzing'. The children's feelings about the fireworks were either not mentioned or were limited to the previously described fears and worries.

On reflection I firstly began to question whether my decision to delay the fantasy until after the real Bonfire Night event had taken place had actually militated against the success of the fantasy. Perhaps allowing the children to build their own fantasy experience before the actual event would have allowed their minds to remain more free of preconceived ideas and given them the chance to really use their imaginations about sight and sounds, tastes and smells associated with Bonfire Night. I also believe that the children's preoccupation with safety from danger may have arisen from their parents' dire warnings which were obviously still very much at the forefront of the children's minds and that this preoccupation may have prevented the children from relaxing into the fantasy experience and really enjoying it.

This session also reminded me that I, as the guide for the fantasy, am not in charge of what is happening in the children's minds. I provided the framework, but the fantasy is constructed and owned by each individual child. Thus the outcomes cannot be determined by me, but must be accepted as the products of the children's imagination. I can see that the children are free in their own minds to follow their fantasy wherever it leads them and that I must therefore be very
careful in my choice of script design. This consideration is, in fact, a greater challenge and cause for concern than those problems and fears I experienced before commencing any scripted fantasy work.
Chapter 5. Some comments and conclusions.

In this research, I tried out with my class some activities associated with right brain learning which were new to us and significantly different from my usual way of working in my classroom. I made a conscious attempt to involve the children in the preparation for and the evaluation of these activities. Although I had previously decided on particular activities I was able to discuss with the children, at certain stages, how we should proceed. It was a straightforward task for me to ask the children, as co-researchers, how they felt about what we were doing, although their age and stage of language development made it harder for them to verbalise their feelings and thoughts. This made true co-operative inquiry difficult. However, I did consult the children much more than was my normal practice.

Although I was aware that a teacher’s positive attitude in the classroom can reap rewards in the areas of more positive attitudes and behaviour and improved achievement levels in the children, it has never been easy to be consistently positive when involved in the day to day events of the classroom. Good intentions often fall by the wayside and things are sometimes said which are later regretted. Making interpersonal relations a focus of this research helped me to keep associated ideas very much in the forefront of my mind and planning definite activities ensured that these ideas were actually implemented in the classroom.
No longer was I trying to maintain a unilateral positive response approach to what the children were doing in the classroom, but was working with the children deliberately to try to set up and develop positive relationships in the classroom and beyond.

In our school most children conform to the norm of acceptable behaviour when under the teacher's direct supervision, but tend to behave more wildly and aggressively when this direct supervision is removed. In many children the only control appears to be that imposed from outside, rather than being self-control arising from within. Thus unacceptable behaviour is much more prevalent at playtimes and lunchtimes than at any other times during the day.

This research has demonstrated that change can be brought about in the ways in which children relate to one another in the classroom by use of strategies such as those described here. Activities to build up self-esteem and to help children learn how to relate positively to one another constitute valid ways to use time available in the classroom. Activities to improve classroom climate, making it more positive, accepting and supportive with diffuse friendship patterns are valuable in that they allow everyone to concentrate on performing work-related tasks to the best of their ability and hence academic achievement levels may improve too, although no formal assessment of achievement was included here. I found that
less teacher time was needed for 'policing' bad behaviour and sorting out interpersonal problems so more was available for teaching.

As a practising classroom teacher I am very aware of the constant pressure on teachers to fulfil National Curriculum requirements with their classes in a limited time period during each week. However, the activities described here can all be incorporated into the normal teaching day and into normal curriculum planning. Circle time and other discussion and role play activities can form part of the Speaking and Listening strand of National Curriculum English. Reading and writing activities likewise can be incorporated into planning for English work. All activities can be part of a Personal and Social Education course and some can be included in a Religious Studies course. Therefore the activities need not be viewed as isolated events and yet more work to be added on to normal practice, but can become an integral part of the present curriculum.

I found that all the activities tried out concerning the preparation for initial entry into school and to my class, ways of talking and relating to each other throughout the the school day and the circle times and follow-up activities had positive outcomes. The new intake children settled quickly and happily into our school routines. The Year 1 group demonstrated a more positive attitude to school work, exhibiting high levels of motivation and joy in their successes. This change in their behaviour supported Borba and Borba's (1978) claims of a strong correlation
between self-esteem and academic achievement and demonstrated the effectiveness of their and Canfield and Wells's (1976) suggested strategies for improving self concept. Mosley's (1991) circle time approach and the follow-up activities did result in markedly improved interpersonal relationships in school. All the children developed more positive, caring attitudes towards each other and interpersonal relationships were better than I had previously experienced in this school or with other children of this age group. Classroom attitudes also extended into the playground and behaviour there showed marked improvement.

Visual displays of children's positive, friendly actions proved extremely valuable as a constant reminder of what our aims were, as a focus for discussion and as a public celebration of achievement. They also served as an introduction, to other adults, of what we were doing in our classroom and others joined in the activities. Another teacher in the school has already introduced a similar idea to our 'friendly deeds tree' in her classroom in the form of a 'friendship wall' with another brick being added for each friendly deed reported, with details written on it of the name of the child and the friendly deed.

Having experienced the success of these activities in my classroom I am convinced of their value and have continued to use similar activities since the research period ended. I hope that, after seeing some evidence of improved behaviour in the research group and hearing reports of the results of the research,
our staff will decide to investigate further and eventually come to adopt such strategies in a school-wide approach. I believe that whole school implementation of such activities would lead towards a general improvement in behaviour and relationships in school with the children taking more control over themselves, thus establishing better conditions for learning in the classroom and reducing interpersonal problems in the playground.

My two attempts at the use of guided fantasy in my classroom were designed to introduce more right-brain thinking into the children's preparations for language work to find out if this did indeed result in higher quality work as its advocates have claimed. I wanted to find out if exercising their imaginations during a scripted fantasy session would inspire my children to speak and write freely about their experiences and result in higher quality language usage, as had been claimed for older students and adults by Williams (1983), Glouberman (1989) and Hall et al (1990). I feel that my experiences to date of guided fantasy support these claims, even for children as young as those in my class.

Following up the first (park) fantasy with a drawing and teacher-scribed verbal description encouraged the children to process the fantasy through means with which they were familiar. Our activities to enhance self-esteem and develop positive interpersonal relationships had helped build a supportive classroom climate where the children were not worried about speaking out. As they had
enjoyed an exciting fantasy experience they were happy to tell me about it, with the outcomes described in the previous chapter. I believe that asking the children to write about their experience after the second (Bonfire Night) fantasy increased the difficulty of the task for them as they had little experience of writing. Asking them later to 'read' aloud what they had written added an extra, unfamiliar step to the process, so the telling had been distanced further from the experience and some of the spontaneity and excitement was lost in the process. I think that this had a detrimental effect on the quality of output. However, I still feel that the scripted fantasy session helped the children to develop their creativity and increased motivation to write. I believe that this limited research demonstrates that guided fantasy does have some value in the infant classroom in language development and plan to follow up this work with future sessions where its worth in this and other areas of learning may be investigated further.

My fears for loss of control of the children were unfounded, as they showed a high level of involvement in the proceedings and showed pleasurable anticipation when the next fantasy session was announced. As for my question of whether, after twenty four years of apparently successful teaching, it was worth trying out these new ideas, I believe that the results of this research speak for themselves. Not only were these activities worth trying out, they are, in my opinion, well worth repeating and developing further, in every infant classroom, as part of the promotion of learning where both hemispheres of the brain are encouraged to
work together to complement each other and maximise individual learning potential. As well as providing a channel for present day learning, if young children are encouraged to develop imaging skills through guided fantasy, these skills may be used as a basis for further development in school and later in a variety of areas in everyday life. This research has, then, provided limited evidence of improvement in academic achievement levels, i.e. the improved general standards of work for the Year 1 children, as a result of enhancement of self concept, and the class wide positive effect on quantity and quality of output in language work resulting from the scripted fantasy sessions. Both sets of activities resulted in definite motivational benefits and, even for this reason alone, deserve to be pursued further.

At present there is a wide range of literature involving left and right brain thought processes, multiple intelligences, and learning modalities. In practical terms it is unlikely that, with current workloads and stress, many teachers will have the time or inclination to search through all this literature for anything relevant to their practice. However, it is necessary to understand the theory behind the suggested activities if they are to be carried out under optimum conditions in ways which will achieve their advocates' intended aims. I believe a teacher must always be able to justify why (s)he is requiring children to do any activity and must be clear in his/her mind what is the best way to achieve the desired aims. Available literature about activities to improve self esteem and
interpersonal relations, (for example, Borba and Borba 1978, 1982; Canfield and Wells 1976) contain some background theoretical information but do not refer to the significance of right and left brain functioning and the importance of both hemispheres working together in harmony to maximise thinking potential. Neither is this information highlighted in the literature on scripted fantasy. The results of this project have pointed out to me the need for further research into the actual effects on academic achievement of increasing the level of right brain activity encouraged in infant classrooms, so that the result of a more balanced, holistic approach to teaching and learning may be assessed further. Rose's (1985) claim that an ideal learning method to produce maximum response will only be achieved through orchestrating a balance of left and right brain activity and employing a full range of modalities merits further investigation.

It would certainly be beneficial, for teachers and their children, for literature to be produced drawing together the various aspects of brain theory and suggestions for practical activities for whole brain learning in an accessible form. I believe that this piece of research constitutes a small step in that direction.
Bibliography


