A study of the impact of art in Irish pre-schools on children's creative development and associated learning.

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Abstract

Ireland, in the last decade has witnessed an increased demand for child care services. The government has responded by addressing the quality of childcare services and the educational needs of the childcare workers. They have approached these issues by implementing a quality framework called Síolta and the new early childhood curriculum framework Aistear. Nevertheless, to date, these frameworks are not mandatory. Therefore each pre-school setting has its own limitations due to childcare workers' experience and facilities, and these consequently influence and affect a child's experience during art. Similarly, the theoretical framework and methodology of each pre-school will affect the way in which art is facilitated and creativity is fostered.

The object of this research was to study the pre-schools art systems' impact on children's creative development and associated learning, by analysing the provision of art in the Mainstream, Steiner Waldorf, Montessori and HighScope pre-schools. This research used both qualitative and quantitative methods throughout two distinct phases of primary research.

In fulfilling this objective, it was found that the value system of each preschool affects the provision of art through its environment, facilitation, and objective of exercise. Areas of conflict were identified between children's overall and creative developmental needs, and responded to with recommendations of best practice. Ultimately, the objective of the art exercise should where possible *be* creativity nurtured appropriately to each child's developmental stage.

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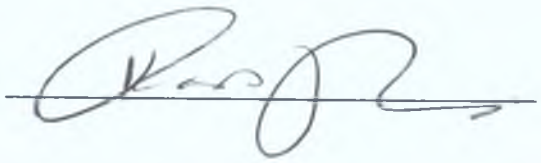
Declaration

I confirm that the enclosed is all my own work with acknowledged exception.

Signed 

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List of abbreviations

DES	=	The Department of Education and Science
NCCA	=	The National Council for Curriculum and Assessment.
OMC	=	The Office of the Minister for Children.
OECD	=	The Organisation for Economic Cooperation and Development.
FETAC	=	The Further Education and Training Awards Council.
NCVA	=	The National Council for Vocational Awards.
CECDE	=	The Centre for Early Childhood an Education.
NCNA	=	The National Childcare Nurseries Association.
VEC	=	The Vocational Educational Committee.
BCCN =		The Border Counties Childcare Network.

Chapter 1.
Introduction chapter

1.1 Introduction

For a variety of economic and social reasons the last decade in Ireland has seen increased demand for child care services to accommodate an associated rise in the number of parents in the workplace. In response, the government has sought to develop the quality of childcare services and meet the educational needs of the childcare workers by rolling out two successive national development plans for Early Childhood Care and Education - The EOCO 2000-2006 and the NCIP 2006-2010. They have also addressed the issue of quality as an area of particular need by implementing a quality framework called Síolta and the new early childhood curriculum framework Aistear. However, to date, these frameworks are not mandatory practice and consequently many pre-schools are left to educate as best they can with the facilities they provide. Each pre-school setting therefore has its own limitations due to childcare workers' experience and facilities, and these in turn influence and affect a child's response to the art experience. Similarly, the theoretical framework and methodology of each preschool will affect the way in which art is facilitated and creativity is fostered. Some research into the scope and implications of these effects would therefore seem appropriate. Creative thinking and artistic elements in education are of fundamental importance (Iannaccone, 2001). If such importance is to be placed on these elements then it is equally important to understand their processes and methods and how these interact with other developmental areas. Furthermore, since we build our knowledge on past experiences this understanding is particularly important in considering the development of the child. This research seeks to observe and analyse the effects of pre-school methodologies within art and their impact on creative development and associated learning skills. The objective of an art exercise, environmental structure, facilitation and overall preschool

methodology will have a direct effect on children's creative learning through art (Aubrey, 2006).

1.1.2 The Irish pre-school systems

The pre-school services available in Ireland are Mainstream, HighScope, Steiner Waldorf and Montessori. All provide painting and drawing for children as part of their weekly, if not daily, time table. The following is a brief description of each to familiarize the reader; more will be said about them in the literature review. HighScope is a whole educational approach which begins in the pre-school setting originating in the United States of America as a response to "the persistent failure of high school students in Ypsilanti's poorest neighbourhoods" (Hohmann & Weikart, 2002, p.3). Its adherents follow an art curriculum which is based on the principle that children are active learners and that children learn best from activities which they plan and carry out themselves (Hohmann & Weikart, 2002). The emphasis then, is on the child reflecting upon their work and learning from these experiences. Mainstream pre-school is viewed as both private and government funded community childcare services. It is supported through Síolta and more recently, Aistear. Síolta is currently being delivered through a co-ordinated national development plan, while Aistear is engaged in partnership talks with the Síolta coordinators to attempt to broker a joint roll out plan. Broadly speaking, Síolta is responsible for quality while Aistear will be responsible for the content. The Aistear curriculum focuses on the development of the child through active learning and the use of their senses under the themes of well-being, identity and belonging, communication and exploring and thinking. This curriculum emphasises children's formation of their own ideas and expression of their unique and personal imagination (Beaver et al. 1999). The Montessori practice was founded by Maria Montessori, the first woman in Italy to receive a medical degree at 26. Her teaching background was in working with learning disabled and disadvantaged children. The Montessori Method focuses on self-directed and child-initiated learning and emphasises nature, morality and order. Rudolf Steiner established his first Steiner Waldorf School in Stuttgart Germany in 1919 based on the principles of his book "*The education of the Child*" (1907). This educational places emphasis on the teacher leading by example, though free play is also valued. It

places equal emphasis on emotional, cognitive and social development. Routine is similarly valued through rhythm, repetition and reverence.

Each curriculum has developed independently in response to a variety of differing circumstances; within Montessori and Steiner Waldorf pre-schools they have developed their educational curriculum from the beliefs of their founding mentors. Mainstream and HighScope curricula are made up from a collection of theorists and all are left to be followed in a self- governed environment. Beyond the philosophies and practices of the pre-schools there is a great deal of theoretical work which refers to pre-school art and creativity both directly and indirectly.

1.2 Purpose of this research

The object of this research was to study the pre-schools art systems' impact on the children's creative development and associated learning. This involved a study of the theoretical methods used to analyse children's art and the body of theory surrounding each pre-schools' art education, including specific emphasis on the studies of creative and developmental theorists. This was undertaken in order to critique how each pre-school approaches the use of art as a medium for children's creative development. The research centred upon the structure of the art environment, the facilitation of art through the role of the adult, the objective of the art exercise and where the child was placed in the art experience.

1.2.1 Research questions

This research was led by six questions which follow below:

What are the benefits of an art experience for preschool children's creative development?

- What Impact does art have on creative development?

What skills support creative development in children through the art experience?

- Skills developed through an art experience to support creative development

What is the optimum environment for creative development through art?

- Provision of space
- Objective of the art exercise
- Maximising the environment to support creative development

What is the most successful facilitated approach for creative development?

- Value placed on the art work
- Facilitation lead with: empathy/guidance/directive
- Facilitators control over: access to materials/time in art experience
- Maximising the facilitators role to support creative development

Does each system practice mirror their published materials and theory?

- Key points of theory to practice in an art experience within each pre-school system

- The practical achievements of theoretic goals and the impact of theory to practice issues

How does each of the four ECCE systems researched support children's creative development?

- The impact of each ECCE system's curricular approach to art on children's creative development.

1.3 Research construction and design

The secondary literature informed and influenced all aspects of construction and design within the primary research. The observation tool was sourced from Eglinton (2005) and adapted for the purposes of this research. This was used in the first and second phase of the primary research to observe pre-school art time and the art workshops accordingly. Interviews were used after the pre-school art observation to provide more comprehensive data gathering and they further helped form the questionnaires to obtain quantitative data. After the observation phase, the social play continuum (Broadhead, 2006) was sourced from the secondary research as an additional observation tool for the art workshop action research. The art workshops were constructed through the pre-school theory obtained from the literature review, the pre-school observational notes and the interviews and questionnaires from the pre-school staff.

1.4 Methods Used

1.4.1 Secondary Research

Underpinning the literature review was the need to understand the use of art in Irish pre-school systems and its effect on creative development and associated learning skills. This involved a detailed study into both the theoretical methods used to analyse children's art, creativity and development, and the body of theory surrounding pre-school art education and development. It further involved a review of the relevant work of theorists regarding pre-school childcare, including the more influential development and creative theorists, and a review of National and International pre-school policy. To gain an understanding of the use of art in the Irish pre-school systems it was necessary to study each system's curriculum, how art is valued within it, the role of the adult, the supporting environment and hence how a child experiences art in each. The requirement of this study was to inform the various other stages of the research and to serve as a base of knowledge for the research in the analysis of findings.

1.4.2 Art workshop observation tool

The secondary research literature was used in the creation and development of the art workshop observation tool. Areas of assessment and analysis within art in early years education have already been defined and where seen as creditable were used for this research (Eisner & Ecker, 1966; Barnes, 1987; Gardner, 1988; Wright, 1994; Eglinton, 2005). The areas identified and used as assessable are: perceptual and cognitive development, social and emotional development, artistic and expressive development and technical skills (Eglinton, 2005). Each assessed developmental area has subdivisions which were included as categories in the observation tool. This highlighted the skills developed during the art experiences. In assessing the child within the art experience the notes from an art-therapy child art study (Simon, 1980) were used to add further categories to the observation tool within the criteria of physical environment, social and emotional learning environment, art materials and teaching practices. This enabled a more holistic observation. The observation of pre-school art time was also used in the construction of the development of the tool. This may seem strange to the reader as the tool was actually *used* in the observation of pre-school art time. During the observation it became obvious that the tool as originally constructed, though excellent for identifying creativity and associated learning skills, did not lend itself to the rapid recording of group- based activities where multiple subjects were being observed. It was also noted that the social and interactive nature of the behaviour being studied was not captured by the tool. The use of the social play continuum was thus introduced into the second part art workshop research phase. This assessment tool offers identification of language and action which assist in assessing areas of creative thinking and further development.

1.4.3 Observation of pre-school art time

The observation methods called for by this research were employed through the ethnomethodological approach. The use of participant observation offered a wide spectrum of perspectives. Within the time used to observe each pre-school's art time, the full range of participant observation perspectives were used. This ranged from the completely detached position of external observer to the complete immersion of the total observer who enters and participates in the phenomenon. Through these various

methods, the intention was to assemble as much of the subject's entire viewpoint as possible from within an art experience. However, due to the limited time available, the use of the key focus point method offered in short term observations was emphasised. A secondary goal of observation was to gain and elicit a perspective of the relationship of theory to practice from within the art experience, to study the adult's tone, utterances and movements within the art experience and look at the limiting factors of the art experience from the adult's standpoint. Similarly the child's response to art, immersion in art and the resultant skills gained through the experience, were observed. As mentioned above, the interviews were used after the pre-school art observation to provide more comprehensive data gathering. The interview guide approach is a semi-structured interview technique and hence appropriate to this research since the informants were already acquainted with the researcher through the observation. Since at this stage yet more data was sought, the questionnaires were introduced to obtain more quantitative data and enable the researcher to explore areas which might have been too sensitive to include at interview. The accumulated information from the observation was used to assist the construction of the art workshops.

1.4.4 Art workshop construction and rationale

To aid the construction of the art workshops, the research used the perspective gained from the observation of pre-school art time. Experience gained by using complete participation in the observation phase was re-used in the facilitation of the art workshops. Similarly, insights gained through data collection in the interviews and questionnaires were invaluable in constructing the content of some art exercises. The study of the secondary research was used to gain insights into what criteria can be used in judging what art materials and usage are appropriate for children of differing abilities in the pre-school setting, their expected learning outcomes and creative developmental needs. The combination of the primary and secondary research was used to inform and then form the construction the art workshops and recreate a realistic practical setting. The construction of the art workshops was used to look deeper into the aspects of creative development through the objective of art exercise, environmental structure and facilitation. Hence it provided a fuller picture by which to

compare the skills and elements of creative development instanced in each practice. This information offered further understanding of how each pre-school value the art experience, the effects of the adult's ability to facilitate, and benefits or restrictions within the art environment for creative development. Since the workshops were constructed with the intention of recreating the conditions of the preschools observed in the earlier stages of the research in order to collect data over a longer period of time the data collected was also used to compare the relationship of theory to practice in the analysis.

1.4.5 Analysis of findings

This research did not set out to test a hypothesis or theory but was instead exploratory and looked for potential relationships between behaviours, events and the relationship of these variables. To best answer the research questions through this predominately qualitative study, phases of quantitative data analysis were also used. The application of a mixed method approach of these two research types was put into action for the analysis of the observation notes. Triangulation was used through the mixture of methods in the examination of the same phenomenon to corroborate the research findings' credibility (Denzin, 1978). The different methods themselves provide different perspectives and thus the provision of triangulation (Aubrey et al. 2000). The triangulation of the recording materials used in the observation has helped record many of the aspects which might have been missed through just one method, offering a multi- observational perspective (Richardson, 2003).

1.5 Conclusion

This research studied the impact of pre-schools' art systems and the relationship of theory to practice on children's creative development and associated learning by exploring and explaining further the benefits of an art experience for creative growth and development. It aimed to highlight skills necessary to develop and support creative development through a creative art experience. One main intention of this paper was to determine the optimum environment for creative development in an art experience. This question was also answered by looking at the supporting factors of

the provision of space, objectives of the art exercise and how they can both best sustain the creative environment. Other objectives of this research were to find the approach which most successfully maximised creative development; which elements best supported this by control over access to materials, work space and time in the art experience; how this directly influences the child's provision for creativity.

Chapter 2.

Literature Review

2.1 Introduction

The intention of this secondary research was to develop a thorough understanding of the use of art in Irish pre-school systems and the effect this has on creative development and supporting skills. In order to evaluate such an effect a detailed study was undertaken into the theoretical methods used to analyse children's art and also into the body of theory surrounding pre-school art education, including its influence on art teachers, psychologists, analysts, art critics and commentators. The research involved a fuller understanding of the major approaches, the more influential developmental and creative theorists, and a study of national policy and overview of international pre-school policy. It was necessary to study the curriculum of the Irish pre-school systems, where the arts are placed, the role of the adult, the supporting environment and how the child experiences all these. The requirement of this study was to inform the observation of art practice and to recreate each of the pre-schools' art experiences, by organising art workshops in the primary research phase.

2.2 Child creativity and the origins of art.

2.2.1 Human creative evolution

Since prehistory, humans have used art to communicate thoughts and feelings through drawing, painting and sculpting. Art has been used for many purposes and to express the gamut of emotions, including ideas associated with the essential issues of life, death, joy and sorrow, which are rooted in the survival of the individual and the community (Richter, 1985). Neither is the observer left untouched. Different types of

creative expression evoke recognition, acceptance, pleasure or apathy, denial and fear. Herbert Read (1949, p.58) describes humans' primitive use of art as a means of surviving and adapting:

> "For a moment he has arrested the flux of existence and has made a solid stable object – out of time he has created space, and he has defined this space with an outline. Under the stress of his emotion this outline has taken on an expressive shape, has become an order, a unity, and a formal equivalent of his emotion".

Read (1949, p.58) uses the words organic and geometric as two distinct modes of art to describe this "formal equivalent". The organic style is viewed as more realistic and was produced by those who inhabited and evolved in a more manageable, temperate environment and climate. Their art was expressed through natural curves, conveying a joy and confidence in life by enhancing and understanding nature. Those who used the geometric style lived and evolved in parts of the world where the 'flux of existence' he believes, would have been more hazardous. As a result of this their art was much more influenced by issues of control, was more abstract and hierarchical and much less dependent on organic matter. Read believes that early humans' style of art was directly related to their relationship with the environment and Richter (1985, p. xv) adds a dimension by expressing this in terms of the individual "Every work of art is a symbol, a hieroglyph of a 'human' experience".

In the first century B.C. a Roman architect Vitruvius recorded that the ancient Greeks explored and used the idea of recession and projection and a number of drawings from Greek and early Roman times show spatial illusion (Smith, 1995). In 15th Century Renaissance Florence, two Florentines, Leon Battista Alberti and Filippo Brunelleschi were accredited with the 'invention' of "Linear Perspective" which is the "system for representing three dimensional space on a flat surface" (Cole, 1992, p.12). The most famous cave drawings which survived from the Palaeolithic period are in North Africa and Southern Europe and Read describes their presentation as both three – dimensional and linear two-dimensional art. The organic style re-appears through traditional 19th century European art and is seen in Italian Renaissance, Egyptian and

Chinese art (Richter, 1985). The geometric style is illustrated for example, in Japanese, Romanesque and the modern Cubist style. From this, it follows that organic and geometric styles keep re-appearing throughout history; hence it is legitimate to both look at art history as a continuum and compare the modern with the ancient, since the primal geometric and organic forms are seen to re-emerge albeit in different guises. Furthermore, this is irrespective of race, culture and geographical considerations.

During the 20th century, within Europe, a new style of art was being discussed and it was again a time of great change in the history of art, the concept of self being established by the 'avant garde' movement and the word 'expressionism' was used. The artist Matisse seemed to be searching for wholeness – not a singular approach. Writing some "*Notes d'un Peintre*" in 1908 he said "It is in the whole disposition of my picture – the place occupied by the figures, the empty space around them, the proportions – everything plays its part" (Reid, 1949, p.187). A similar sentiment can be detected in Luquet (2001, p.102) who describes a developmental stage of children's art which he called "intellectual realism". *Everything* known and felt about the object being drawn is conveyed rather than being restricted by a fundamental commitment to perspective. Lowenfeld and Brittain (1987) tell us that as a child draws or paints, through creative formation, they are reflecting and expressing their knowledge of the environment from personal thoughts and feelings. The abstract style in the 'geometric' approach of early times is similar to the expression seen and produced in children's art; therefore comparisons can be drawn between the development of child art through to adult art and the development of the history of art from prehistory until today. According to Strauss (2007, p.16), clear comparisons can be seen between young children's symbolic pictures and human narration through art and culture. She asks "Are we dealing with a language that is at the root of everything that is coming into being?" Montessori (1972, p.283) elucidates a similar idea when writing that early humans' "pictographs" are similar to children's drawings in the representation of the human figure, used as a form of non-verbal communication. Strauss (2007, p.12) makes a connection between the stages of civilization and children's developmental periods of creativity and views the "first picture writing" as "universally human". Kellogg's (1969, p.208) findings show the "art of prehistoric

man are the abstract and early pictorial motifs commonly found in child art today". These views are supported by Viola (1942, p.16) who, when writing about Cizek (1865-1946) a Viennese art teacher who pioneered the child art movement, agrees that the best way to understand child art is to "study primitive art, both of races that lived tens of thousands of years ago and the art of living primitives".

2.2.2 Universal symbols in children's art

A grounded knowledge of the methods and symbols used by the child in the art experience was seen as vital for this research to properly understand pre-school art. It was Cizek who first demonstrated that the basic art abilities are inherent and develop naturally in childhood (Smith, 1996). Early childhood is a time of great capacity for learning, motivated by innate processes (Gardner, 1993). There is much collaborative evidence of universal patterns of development in the art of young children (Kellogg, 1969, 1979; Brittain, 1979; Cox, 1992; Strauss, 2007). Kellogg's (1969) examinations are based on the investigations of approximately half a million children's drawings. She understood that the foundations of art come from visual awareness and physical movement and that art-making is a natural activity for human beings and therefore has universal aspects. Rita Simon (1992, p.34), an art therapist of some fifty years' standing believed that, "the art work of children offered a means to understand a universal language of symbolic images".

In her research, Kellogg (1969) found that while children's art will always be affected by their culture, every child while developing through discovery will follow the same graphic evolution. Gallagher (2004) agrees, stating that in children's spontaneous drawings each child will explore a unique path but stay within a universal pattern. She states that the immediate environment is reflected in the expression of the child's subject matter which correlates to early humans' drawings of people and animals. Kellogg (1979, p.106) shows "the common denominators inform combinations for Humans and Animals" which she views as the mind's flexibility in interpreting visual data and "communication through art". Lowenfeld and Brittain (1987, p.223) further support these views, saying that the universal figure of the human with its order and lines is biological, the mode of this universal graphic representation being through

symbols. Strauss (2007, p.12) maintains that "in the first seven years the language of symbols is the same the whole world over". The schema stage of artistic development starts between 3-5 years and continues till 7; these symbols or simple forms represent objects which the child can use to describe "feelings" and "experiences" (Eglinton 2003, p.17). Gardner (1990) further explains, by using the term 'sensory-motor activities,' that children will read their representational meanings and so create symbolic references for their experiences. Gibson (1986) tells us that the perception of a graphic representation is an 'arrest' of events naturally flowing in our world and children communicate while making these pictures to overcome limitations and create 'arrested qualities', thus making it part of their living world

Lowenfeld and Brittain (1987, p.17) state that when children are given the opportunity to draw or paint, the experience of art materials allows for the development of self-concept and self-identification. Simon (1992) understands the child's first drawing of a circle, which they persist in making, as a symbol of self as an entity which will be embellished with lines coming out of the circle or added in the circle. The drawing of a square to surround the circle represents the need to distinguish them from other people and to symbolize what is not self (Simon, 1996). Strauss agrees with Simon's interpretation of the circle and validates it by arguing that the sense of ego appears in children's art at the age of 3, placing this within a schema which she called the 'child's vocabulary'. In essence, this is the range of symbols which a child uses when passing through the early, middle and late phases of development (Strauss, 2007).

Before the age of 5, the child's universal human figure representation is recognisable as 'tadpole man' due to its resemblance of the first stages of a frog's development (Ni Mhurchu, 2003). The torso is nearly always absent, with lines which are accepted as arms and legs, extending out and downwards. Children up to their 7th year, unknown to themselves, focus mostly on drawing the motif of the human with variations and calling it 'person', 'man' or 'tree' (Strauss, 2007). The ability of children to make analogies is important in learning and concept formation. This, combined with abstraction is fundamental to create an object (Gallagher, 2004). Lowenfeld and Brittain (1987, p.31) explain that the stimulation of painting for the child is in the display of personal thoughts as part of "creative and intellectual growth". They further

propose the view that "each drawing reflects the feelings, the intellectual capacities, the physical development, the perceptual awareness, the creative involvement, the aesthetic consciousness, and even the social development of the individual" (Lowenfeld and Brittain, 1987, p.59).

What this reinforces is that in practicing art children are motivated by innate processes which are founded in visual awareness and movement. They develop through refining their motor skills in these movements until they become able to represent extremely basic symbols. These symbols are universal and are used to express their immediate environment. Crucially, this activity is closely tied up with the development of the ego, self-concept and self identification and when viewed from the adult perspective can offer insights into the developmental progress of the child.

2.3 Children's creativity in theoretical context

2.3.1 Child development through creativity and art education

Children's art can add to their understanding of the world around them, their development within it and further extend growth and learning. Children can develop creative thinking and sensory learning through art and these aspects should be both offered in a varied approach, and appropriate to their age (Chapman, 1978). This allows children access to a host of learning outcomes. Creative learning enables children to make sense of, and wonder at, the world around them; develop a sense of self; express themselves; think of new ideas; and problem solve (Arnold, 2003; Bruce, 2004). The employment of creativity and imagination seen within the art activity is vital to the development of children as these are important to lifelong learning and play, embodying divergent forms of thinking that lead to novel and innovative combinations of ideas and experiences (Donohoe & Gaynor, 2007). Bruce (2004, pp. 14 -15) further explains that "being creative encourages us to know ourselves and gives us independence...we can do things for ourselves". Therefore, developing creative skills in the early years can provide a good foundation for creative thinkers in later life.

Marzollo and Lloyd (1972) believe that creativity which comes naturally to a child must be held fast as it is lost in our logical world. This could be similarly said of play. Art and play can be combined to great advantage for the development of children. Playing and drawing, when used together, can foster creativity which helps children understand and solve problems in their own world. Through play, children are using all their senses "listening, feeling, touching, smelling" explains Ni Mhurchu (2003, p.61) and this helps them create more meaningful representations in their drawings. The child's movement while using these senses, which Matthews (1999, p.6) describes as "choreography of play", will often result in the children's drawings containing "complex descriptions of a reality, which have visual, haptic, kinaesthetic, and kinematic aspects". His view is that the use of art materials and drawings are resultant representations of events and observed objects. Thus the movement associated with play can be seen as translated through the child's artistic activity with the corresponding cognitive and perceptual learning outcomes. Neurologists and Early Years' professionals argue that creative activities and children's enjoyment of art will stimulate interactive relationships which will increase learning (Bamford, 2005; Burke, 2005).

The language children use while drawing can illustrate the creative thinking of a child taking an idea and making it their own (Coates, 2006). Younger children aged between 3 -5 have spontaneous creativity in their representations and this is more evident when verbalisation occurs, therefore, encouraging their creativity is crucial in pre-school (Gardner, 1980). The use of tests of creativity, both figurative and verbal devised by Torrance (1970) and others, have shown that pre-school children of 3 - 5 years are more creative in their art than 6 year olds and upwards. A 'drop' in the creativity of children aged 5 -6 years is noted, as more grown-up expectation of their representations of images has developed (Ni Mhurchu, 2003). Kellogg (1979) also found that before the ages of 5, both sexes' art work were the same in that they drew similar pictures and shapes, but after 5 years girls tend to draw more humans and boys tend to draw more planes and boats in different quantities. The visual content and dexterity within a child's drawing can highlight different developmental stages. Kess (1997, 2003) presents the idea that when children draw an object, they have already analysed it and are showing its meaning. Therefore if a child is engaged in a way that

is significant and meaningful, this will be helpful in interpreting and understanding their world. Bruce (2005) supports this further by explaining that a child's representation is an orderly management of holding to an experience by various aspects of learning together (Bruner, 1981). Nearing the age of 3, children become aware that their markings are representations and so the markings become drawings and between 4 – 5 years they are aware that they are drawing people and so will want to narrate their work (Chapman, 1978). Gardner (1990) explains that at the ages of 3 - 4, children are drawing familiar objects such as a person which is a child's concept rather than a likeness. By the age of 4 - 6 they start to construct these representations as a "first draft" or picture format, by placing a constricting feature like the sky and making a composition of sorts (Gardner, 1990 p.18). Luquet (2001) states there is nothing to stop a child from drawing in perspective as it is their choice, while drawing, being a form of play, is useful as an activity and as a consequence in itself. He presents a theory of four stages of classification in children's art (Luquet, 2001):

- Fortuitous Realism – A child starts to make marks for their own sake and realises that it could be a sign or image.

- Failed Realism – Once the child has realised that these marks could actually represent something, they will try to reproduce them and because they don't yet have the skills, they fail.

- Intellectual Realism – The depiction of the object, showing details and elements that are not visible either from the observation or the location of the object.

- Visual Realism – It has a fundamental commitment to perspective.

For children, drawing can be a visual form of play but as outlined earlier they are learning to make connections about their environment so the development of visual reality for pre-school children is not important and could be limiting as "children draw what they know, not what they see" (Luquet, 2001, p. xiii). He wrote that perspective or 'visual realism' was not the most natural way to draw or even the most

logical. By analogy he points out that in structural, architectural and creative pictures by designers, mechanics and engineers, images of objects and buildings are presented by mixing the perspective and showing it from different viewpoints. Lowenfeld and Brittain (1987) write that while drawing reflects intelligence and growth, it also highlights awareness of environment. Matthews (1999, 2003) examines children's development in visual expression and takes issue with ingrained judgment. The conventional approach describes this progress from `primitive' earlier stages to `superior' ones when lack of skills and development in their representational thinking are overcome and they arrive at a `visual realism' endpoint. He maintains that these skills should not be measured by adults' standards or ideals. The process involved in the child's efforts is more direct and unaffected by their criticisms of representational realism. To describe a child's interest in the structural investigations of objects, thus bringing it to construct a representation, Matthews (1999, p.61) states "Attractors originate from muscular and sensorimotor responses to internal and external events", they "become interiorized to form conceptualizations' and guide the 'child's interaction with the world". This is a position shared by Kess (1997, 2003) who view's art by children as a semiotic mode which is communicating their knowledge and ideas, thus underlining the simplicity of this innately motivated activity and its resistance to judgement from the adult perspective.

2.3.2 Creativity and associated development

Chapman (1978, p.150) informs us that "the pre-school years are a critical time in the child's perceptual development". Perceptual awareness is the developing ability to understand "visual relationships" in children's environments and bringing an experience into consciousness by comparing, contrasting and observing (Larkin, 1981 p.12). The child's reflection on their progress should be encouraged and the development of looking at art works - their own, their peers' and significant artistic works - will help gain an understanding of the artistic process (Gardner, 1990). Eglinton (2003, p.7) feels that the child's perceptual development can be progressed through art materials, using perception developed by thinking, understanding and learning. Larkin (1981, p.21) believes that young children only need a few colours to begin with as their "use of colour is spontaneous" and control of water spillage should

be implemented through use of appropriate brushes. Kellogg (1969, p.144) maintains that for children the essential part of their art is visual pleasure and integration of movement and vision in the act which can explain their pleasure in producing scribbles:

> "Adults do not scribble, and most adults do not function at all in art; therefore, the child has difficulty taking seriously his artistic self education".

Scribbling promotes hand-eye coordination and motor skills and is a vital pre-operation for reading and writing in later learning. When children are teaching themselves to draw they are experiencing a feeling of motivation from within (Kellogg, 1969). Lowenfeld (1958) has broken down the scribble stage into four areas of creative development. The first is called 'disordered' where they will make controlled markings light or dark, due to personality; 'longitude' where there are controlled repetitions or movements, followed by 'circular' where there is further exploration of controlled movements demonstrating the ability to do more complex forms; And lastly 'naming' when the child tells a story about the scribble and so develops the ability to visualize in pictures. Golomb (1992, p.15) tells us that when producing a line that encloses an area and arrives back at its starting position demonstrates a remarkable "visual motor control''.

By helping the child explore its world, thus forming through interaction a deeper insight to new ways to visualise their experiences, art supports cognitive development (Eglinton, 2003). Gardner (1990) agrees, explaining that when a child decodes an object or experience and produces a creative symbol using new methods it progresses their cognitive development. Epstein (2009, p.144) tells us that "overall cognitive growth means pre-schoolers are increasingly able to see things from more than one perspective, anticipate the consequences of their actions". Discriminatory skills are part of the cognitive process so "looking at, feeling and talking about objects makes children much more conscious of this activity as worthwhile" (Lowenfeld & Brittain 1987, p.131). Matthews' (1999) emphasis is on the cognitive development that is encouraged through the child's art making, with a particular focus on action and

action representation in their art. He demonstrates that the child's cognitive function of their early mark- making is relative to their general individual development (Matthews, 2003). He explains that drawing is 'representational thinking' and that children's drawings should be regarded as a process of representational thinking unfolding in time (Matthews, 1999). This problem solving process required for drawing and painting Van Sommers (1984, p.105) explains is one of "cognitive conflict, knowledge retrieval, strategies and control processes" and this problem solving activity is sensitive to instruction. Kaltner and Thomas (1995, p.99) believe that "Creativity in drawing and art involves an ability not to inhibit information". Larkin (1981) proposes that to support experience-orientated art learning, much can be gained by sensory awareness when the body's movements, sounds and smells are considered. He further details that this approach in education "helps the child to become more aware of his own instinctive behaviours as the source bank of stimuli" Larkin (1981, p.9).

Lowenfeld and Brittain (1987, p.67) believe that the social and emotional aspects of group art activities can encourage children to see "the part each person plays and to identify with others' actions". Epstein (2009, p.6) feels that social and emotional learning components are emotional development through "self regulation and self awareness" and social development through "knowledge and understanding of social skills and dispositions". She further lists the social and emotional skills needed in learning: listening, flexible problem solving and task persistence. Nutbrown (2006) provides many examples of children actively developing their listening and group problem solving skills and becoming more aware of their environment and their place in it through art workshops. Epstein (2009, p.168) explains that key elements in social and emotional learning are: positive self identity, feelings of competence and value for the work we do, emotional honesty, self regulation, the capacity for appropriate self expression and "ability to collaborate and choose co-operation over competition". Thus communication within group art is important so children can share information and experiences (Lowenfeld & Brittain, 1987). Gardner (1982, p.117) has defined categories of children talking in the art process as "inveterate verbalisers" and "committed visualisers". He explains 'inveterate verbalisers' as children who talk their way through the art process until it reaches an end and names children as

'committed visualisers' who are so involved with their work that they see no need to talk to others around them. He further discusses that stories will spill out in their drawings "that were out of reach in play" Gardner (1982, p.122). Children's talk during the art process can help the facilitator understand and gain insight into the child's background and interests, providing evidence of the thoughts behind the picture (Coates & Coates, 2006). Coates and Coates' (2006, p.223) study of children talking and drawing investigated the "creative and conceptual thinking which guides its development". They studied the role of talk, subject related matter, social talk and interaction with the facilitator. Social talk recorded within the study highlighted the development of children's social skills through the art experience as they covered aspects of family and friendships thus understanding what it means to be a peer. Coates (2006, p.240) also concluded that "drawing in pairs may provide a focus for the development of a range of creative skills". Gentle (1985) stated that children talking while drawing will share ideas as they do when playing.

Kellogg's (1969) research has brought her to believe that children's development through art can be seen and used as a valid sign of their general mental development. Children can work through their ideas and problems and so understand their world through scribbles and art. She further explains that art is a visual stipulation for the achievement of mental stability (Kellogg, 1969). Jung (1947, p.76) considered creativity as a basic instinct and that the release of creative energy was essential for mental health, believing that "The creativity of the imagination frees man from his bondage to the 'nothing but' and liberates him in the spirit of play." Simon (1992) uses an example of a little girl Clarice, who was finding it hard to cope with nursery school at the start, but her paintings of symbolic images showed her integration and settling in at the nursery. The nursery school teacher felt that this child had used painting as a sort of "self-therapy' by painting" (Simon 1992, p. 40). It is through the exploration of our senses within our environment that we gain information which is fixed through the context of creative activity, so children should be helped to learn by nurturing their senses in a creative environment (Lowenfeld & Brittain, 1987; Eglinton, 2003).

2.3.3 The creative environment

Considerations regarding the type of environment can have a significant impact on creative development. Essa and Burnham (2001, p.70) state that "more space, more toys and equipment, and a partitioned environment rather than a larger open space per child are indictors of higher quality programmes". Prepared surroundings for early learning are important so children will know for example where and what art materials are available for them to use (Nutbrown, 2006). It should be visually rich with opportunities of exposure to art works of the masters and should provide materials and encouragement for children to use their imagination, creativity and knowledge of their affective life (Gardner, 1990). In relating to this environment, Lowenfeld and Brittain (1987) maintains the child takes in a wide source of information through their senses and projects all the elements into a form they understand. 'The interaction between children and the environment is crucial element in learning' and this relationship between the creator and the environment is the most basic and important subject and not the drawing itself emphasises Lowenfeld and Brittain (1987, p.199). Dewey (1934), an educational theorist said that children are active learners and learning should lead to more learning through meaningful interaction with their environment. In the philosophy of his schools he stresses the need for an environment supporting self- expression and exploration (Eisner & Ecker, 1966).

If creativity is to be developed the environment must be in place to support creative ideas and processes. An environment which encourages children to exchange information while drawing highlights the relationship between graphic significance, meaning, and the child's progressive journey through drawing (Kess, 1997, 2003; Hopperstad, 2008). An analysis of children's drawings during storytelling illustrates how acutely children are aware of their environment and how, through many over lapping action sequences, the child will vocalise and make marks on their drawings accordingly (Matthews, 1999). Thus responding to the environment is an integral part of the artistic process for pre-school children. Feinstein (2006) tells us that creative interests grow from experiences the child encounters in their environment and this is a vital linkage within creative development involving personal and emotional experiences; While Dyson (1989) asserts that children's communication while

drawing might be simply to share the feeling of struggling. By empathising with each other in this way children can appear to work as a collective, making it a more creative environment. In this way children can learn in meaningful projects which bring together artistic learning and production (Gardner, 1990). Preparing this environment will benefit children through the support they gain from peers to create more meaningful drawings.

2.3.4 Adult observation and facilitation

All learning has a base history which is created from the foundations of real life experiences therefore it is the positive task of the pre-school teacher to make this progressive (Vygotsky, 1978; Nutbrown, 2006). Facilitation should teach the child through example, breaking behaviour into sequenced steps and offering the child space for practice, elucidates Epstein (2009, p.22). Gardner (1990) states that teachers' must embody what they teach and assessment is vital by looking at the context of their art activities and their development of different forms of understanding and knowledge. Lowenfeld and Brittain (1987) explain that art and creativity are not synonymous. Not all art experiences are creative with teacher-directed art activities. Furthermore they believe "for the child, the value of an art experience is in the process" Lowenfeld & Brittain (1987, p.30). Art is a meaningful way for the children to understand and organise their environment and so the atmosphere and tools presented are important for the children to explore within (Lowenfeld & Brittain, 1987). Eglinton (2003, p.75) tells us that for creativity to develop through the art process, the adult must encourage the children to "investigate, communicate and discover". She states that an adult, to have insightful observation of a child engaged in drawing or painting, must look at how the child uses the art material, do they know that material properly, are they ready to learn a new skill, can learning be extended by introducing a new skill, how does the child turn expression into form and are they satisfied with their work? Below is a table used for the assessment of children's art that supports the facilitator in identifying the level of skills the child has achieved. This observation tool can be used when facilitating an art experience to assist creative development and skills:

Figure 1. Table of Areas of assessment in art

Perceptual, aesthetic, and cognitive development
Engages in discovery and investigation
Notices details
Exercises perceptual discrimination
Builds on prior information
Uses the senses to extract information from the environment
Reflects on own works of art
Reflects on own artistic process
Sees connections in artistic experiences
Connects encounters with art to own art making experiences
Sees similarities and differences in objects and works of art
Understands nature's role as provider of media and inspiration
Develops and decodes simple symbols

Technical skill and use of art media
Uses two-dimensional media with purpose
Uses three-dimensional media with purpose
Can handle a selection of drawing tools with dexterity
Can handle a selection of painting tools with dexterity
Understands and uses natural objects as art media
Chooses suitable media to task at hand
Consistently developing new skills and techniques
Is inventive with art media
Builds on previously learned skills and techniques

Expressive and artistic development
Is able to give form to expression
Overcomes obstacles in the giving of form to expression
Demonstrates progression through stages of artistic development
Understands art as a way to express thoughts and ideas
Uses creative thinking in the giving of form to expression
Is inventive in expression
Uses art as a mode of communication

Social and personal development
Engages in dialogue about art with other children and staff
Treats own art, art of others, art reproductions, and objects with care
Takes turn leading projects and allowing others to lead
Cares for art media, natural objects, and natural and constructed environment

Eglinton (2005, pp.58-59)

Gallagher (2004) studied children's spontaneous drawings during which she looked at the quality implications for children in their learning environment focusing on the facilitation. As a child generally draws or paints quietly, preferring to create simplicity and balance, the adult should mirror this quiet engagement. It is in this aspect of the child's cognitive and social enhancement that the interaction between the child and adult is of the utmost importance. The observer should respect the child's work, provide them with imaginative space and let the child develop at their own pace through the provision of art materials. The adult should provide a stimulating environment exemplifying the best use of materials (Lowenfeld & Brittain, 1987). Matthews (1999, 2003) supports this by recommending that the teacher or adult should provide silent but empathetic support for the child when engaged in art, as it is a vital motivation in these early years for the child to learn independently. He does however, encourage some dialogue shared between child and adult to support their exploration. Eglinton (2003) points out that through lack of experience and confidence some teachers miss the possibilities for cognitive, perceptual and aesthetic growth through art facilitation and observation. Appropriate positive verbalisation

from the adult observer to the child about their drawing will develop their confidence, ability and own sense of self states Ni Mhurchu (2003). Lowenfeld (1954) believes that the contents of the child's art could contain significant personal issues therefore the teacher should be able to engage and empathize with the child. Chapman (1978) also suggests that as the child is expressing an experience through their picture, the adult should engage with them so the child can then repeat the picture until happy with it and then move on. The adult educator is encouraged by Eglinton (2003, p.27) to motivate the children through "enthusiasm and excitement, to make an art experience inspirational" and follow the dialogue of encouragement with feedback for development. Larkin (1981, p.9) suggests the teacher must motivate the children by making a "habit of creativity" and use their motivation to re-call and re-create experiences through the art medium. Eglinton (2003) supports Gilliatt's (1983) framework of how to talk to children about art by use of description, analysis, interpretation and judgement. Luquet (2001, p.157) makes the point that if there is intervention by the teacher it should not destroy the child's spontaneous enjoyment of drawing:

> "The most effective suggestions for children are those which are not made explicitly. The best way would be for adults to draw in front of them while making the same mistakes as they do, and talking out loud about the reasons for making corrections. For example, one might begin by drawing two eyes on a profile face, and then erase one of them while saying: 'Oh no! It should only have one eye: the other is on the side of the head and so cannot be seen"

This suggested facilitative style may enhance the child's position towards visual realism this is not necessarily beneficial to their creativity. Creativity encourages and develops divergent thinking and production. When a teacher asks open ended questions it gives the child the opportunity to look at things from a variety of different viewpoints, studies having shown that it is the adult-child relationship that will determine the development of creative thinking. Epstein (2009, p.14) tells us that "the role of the teacher is to guide, rather than control the problem solving process". Adult direction produces more conformity while less structure from the adult offers more

cognitive, emotional, pro-social developments contend Lowenfeld and Brittain (1987, p.81). The adult should motivate drawing through talk and play using their observation and reflection to help the children have "meaningful art experiences" writes Eglinton (2003, p.4). Nutbrown (2006, p.6) describes how the adult in the pre-school setting must offer a safe environment for the children to create and play, removing the "restrictions of the fear of safety". For social and emotional development the facilitator must teach through example and break behaviour into sequenced steps so offering the child space for practice (Epstein, 2009). Thus Lowenfeld and Brittain (1987, p.216) state that the recommended best facilitation within art is a teacher who gives encouragement, different suggestions and makes the children feel their work is worthwhile, "Most important of all is to provide the stimulation and the motivation necessary for developing an increased awareness of the environment and provide the encouragement and approval for the creative act".

2.3.5 Pre-school educational theory

Early year's education is set within various pre-school systems. What is of great importance is that all services offer quality childcare through the provision of an educated nurturing and stimulating setting. Friedrich Froebel (1782-1852) became known as the originator of the 'kindergarten system' creating an educational environment that involved practical work through the direct use of play materials and activities. Winnicott (1964) reported important functions and reasons for pre-school education and stressed that it was very important to give a child some space for their own personal development away from the home. He believed this provided a containing atmosphere for the child to express themselves through play and speech, offering a relief and a release from their emotions in an environment "that is not the highly – charged one of the home" Winnicott (1964, pp.191-192). There are key ingredients in the pre-school classroom environment that offer positive effects for children's outside activities and play time. Other theorists offer various key ingredients. Bruce (2005, p.8) names the 'Three Cs' - child, content and context. Nutbrown (2006, p.28) describes consistent features of the adult's behaviours: routines, and information, experiences and materials as important. Emotional stability, present contentment and later achievements are affected by these key factors. Aubrey

et al. (2000, p.12) define them as: development of self-esteem in young children, investment in young children, stable childcare arrangements ensuring children interact with a limited number of familiar carers each day, low staff turnover and low adult-child ratios.

Early years teaching should be a process of the child being "actively led forward" emphasises Nutbrown (2006, p.31), thus being able to reflect on what they know and so making connections; the teacher must provide consistent approaches giving children information to help them understand and adapt to changes so they can feel safe learning something new (Nutbrown, 2006). 'Conscious artistic training' (Lievegoed 2005, p.169) should be present and introduced in nursery school: allowing the child to paint and draw with colours, learn to shade carefully and become aware of the many different colours. However, Gardner (1990) negates that no formal artistic training is needed and art should be based in their society, culture and history, so placing importance on their society's value system.

As previously stated, development of creativity in the early years is vital. Younger children aged between 3 and 5 are spontaneously creative in their representation and this is more evident when verbalisation occurs, therefore encouraging creativity is crucial in pre-school (Gardner, 1980). When considering social and emotional development Winnicott (1964, p.193) wrote that the nursery school setting should benefit and extend relationships in the child's life with drawings, music and stories and thus "give enrichment and can help the child to find a working relationship between ideas that are free and behaviour that needs to become group related". Since the teacher's focus can be on creativity rather than daily domestic worries they should be provided with opportunities to express their fantasy life for full creative and intellectual development (Winnicott, 1964). Social and emotional development in pre-school years aid children to develop understanding of their own and others' feelings; to "see themselves as doers, based on their ability to achieve self-initiated goals; widen their social network, developing preferences and forming friendships" states Epstein (2009, p.13). Within the stages of social development friendships are based on shared activities for children aged between 3 and 5 years old explains Sheaffer (2005). Free play in an art activity can be a means to develop a higher-level

of thinking skills, fostering social relationships and emotional growth through choosing their activities and playmates (Lowenfeld & Brittain, 1987). This is analysed by Handy (1997), who identifies 11 intelligences: actual, analytic, numerate intelligence, linguistic intelligence, spatial intelligence, athletic intelligence, intuitive intelligence, emotional intelligence, practical intelligence, interpersonal intelligence and musical intelligence (Broadhead, 2005, p.89). These intelligences are simultaneously active when children engage with other children constructively or through areas of provision Broadhead (2005) tells us. Emotional intelligence is developed through the 'cooperative domain' and it enriches understanding of their world so opening them up to the perspectives of other children, subsequently scaffolding their learning and understanding (Broadhead 2005).

2.3.5.1 Reggio Emilia

Reggio Emilia is an educational system not readily available in Ireland and thus cannot be investigated as the other pre-school art methodologies have been through entering their practical environment and observation of art with the children. Reggio Emilia art is the essence of its pre-school educational and developmental approach and is worthy of a brief synopsis. The Municipal Pre-School of Reggio Emilia was first created in post-war Italy in 1963 and developed by the people within this area. The curriculum holds many features and opportunities for thinking through real-life problems and creative exploration for children. Within the Reggio Emilia Philosophy, the children express their understanding through the symbolic languages of drawing, sculpture and play. The teacher fosters and develops the child's process of evaluation and learning through the encouragement of the revision of drawings, repetition of activities and the modification of each other's art work to further the children's better understanding of the topic being explored. The atmosphere between adults and children is of collaboration and development (Greenwich, 1998).

2.3.6 The development theorists

For the purposes of this research a detailed study of developmental theory as it relates to pre-school children was vital. Developmental theory, in that it seeks to make categories and schemata into tools for objective identification, assessment and

analysis of child development shares much with those purposes. The *focus* of this research differs by concentrating on a specific activity of children within a narrower age bandwidth and a particular environment. Staged developmental theories therefore tend to *emphasise* the importance of childhood, but study the complete development of the individual. From all of the above it can be seen that a study of the development theorists contributes a context within which to view children's development at pre-school age, a framework to analyse this development, tools for this analysis, and an example of the methods and criteria used to develop such tools. Piaget's (1929) cognitive development theory with its foundations in the grouping of symbols into schema and its focus on identifiable physical and mental orientation, beliefs and abilities, lends itself strongly to these goals. The focus of Freud and Ericson's psychosexual and psychosocial theories, though vital to any fuller understanding of child development, were seen as too focused on control issues and the general development of the individual to consider employing within this particular research. A broad understanding of both was nevertheless invaluable in the art workshops phase. Similarly it would not have been appropriate to use Maria Montessori's division of developmental stages into 'sensitive periods', as it could be seen as biasing analysis of findings in regard to the other pre-schools. Lastly, the behavioural theories in the work of Watson, Pavlov and Skinner were considered. Once again a broad understanding of their methods provided context for the work but the prescriptive nature of their use of 'stimuli and reinforcement' and 'reaction to rewards and punishments' in relation to the creative and explorative aspects of art were seen as unsuitable.

As previously mentioned Piaget's (1929) cognitive theory has its foundation in symbols. By a process of assimilation these symbols are grouped and structured into schema; a schema is a category of knowledge that *crucially* contains the process or means of obtaining that knowledge. From the researcher's perspective a schema can therefore be objectified by an analysis of the mental and physical actions of the child. Cognitive development is the process by which the child assimilates, and accommodates symbols into this schema culminating in equilibration (Piaget, 1929). In broader terms this process entails the following: in assimilation the schemas are simply added; in accommodation they are altered and new ones are made if necessary;

and in equilibration the child attempts to strike a balance between the two. This third stage is the most significant since in the first stage the child is applying new knowledge and in the second stage the child is altering their behaviour to meet changes in the acquisition of knowledge. It is in the third stage of trying to place the correct stress on each that cognitive development occurs. Piaget breaks this development down into phases within stages. These stages are Sensorimotor, Pre-operational, Concrete operational and formative. Of these only the preoperational stage is relevant to children in the pre-school setting. Within the ages of 2 – 7 Piaget has defined this as Pre-operations stage which is compiled of two further phases (Beaver et al. 1991, p.142). These are as follows:

Pre-conceptual (2 to 4 years)

- Believes everything including objects have a consciousness
- Will only see things from their own view point
- In play they will use symbols
- Hearing is becoming more important and they are using their senses sight and touch to gain information
- They still gather information visually but with their language skills growing they start to process information in other ways and representations

Intuitive (4 to 7 years)

- The child will now have a simple understanding of right and wrong
- They will depend on instantaneous perceptions as they find abstract thought complicated
- Using more and more language to gather information
- Still seeing things mostly from their own view point
- Performing more complexity in play and use of symbols

Piaget's theory is influential in the way the curriculum is taught and directly affects the Creativity component and how it is delivered. Within the mainstream pre-school

there are stages and abilities defined in the Practicalist approach by the Curriculum Components (Sheridan, 1997; Beaver et al. 1999; Meggitt and Sunderland, 2002):

Children aged three years – They can comfortably use thick crayons, stubby paint brushes, paint and they will enjoy standing at an easel. The child can match two or three primary colours. They will operate a pencil by using their thumb and first two fingers. They can copy a circle and draw a person with a head with squiggles inside to represent a face and sometimes draw arms or legs coming out of the head.

Children aged four years – They will include more detail in their drawings and on request they can draw a figure that resembles a person adding fingers and hands to it. They can hold their pencil like an adult and can copy many letters like X, V, H, T and O. They can name four primary colours and recommended activities would be printing, gluing and sticking.

Children aged five – They have good control over pencils and paintbrushes and can match ten or twelve colours. They can draw a person with a head, body, legs and nose and mouth and eyes and draw a house with windows, door, roof and chimney.

Piaget's focus is purely on the cognitive development of the child; however this research has a much broader conception of child development. Much more will be said on this with regard to the creative theorists but it is worth noting that that this topic can and is covered by developmental theorists. The 'Holistic approach' (Meggitt & Sunderland, 2000, p.1) sees the child as a whole person through their intellectual, social, emotional, physical, moral and cultural development and in studying the patterns of growth, mile stones or normal developmental guidelines are recognised. A child-centred environment is the basis for Pre-School Learning (Beaver et al. 1999; Bruce & Meggitt, 2005). Areas of development have been broken down into:

Physical and Sensory development – Gross motor skills like walking and climbing, Gross and Fine Manipulative skills like throwing or catching or using a knife and fork; sensory skills of vision, touch, hearing, taste, smell.

Cognitive and Language development – Cognitive development is the development of that part of the brain used for reasoning, understanding and knowing. Perception development is affected by previous experiences and involves making sense of what is seen. Language is the development of communication skills through receptive speech - what children understand, expressive speech - the words they produce and articulation - how they pronounce the words.

Emotional and Social development – Emotional development is the development of self-esteem, self-concept and overall feelings towards others and awareness of themselves. Social development involves the learning of skills and relationships with other people so helping them become a member of a community.

Moral and Spiritual development – This is the development of understanding values like respect, right and wrong and responsibility for their actions, so developing an awareness of others ethically and morally (Meggitt & Sunderland, 2000, p.3).

These areas of development *are* used by the various pre-schools but since the focus of this research is on art, it was largely through the creative theorists that they were dealt with.

2.3.7 The creative theorists

The creative theorists hold a collaborative view that creative development plays a crucial part in a child's intellectual development and especially in their creative expression. By narrowing the focus of developmental theory to that of creative development the creative theorists simultaneously deepen it by placing cognitive theory within the broader context of emotional, intellectual, physical, perceptual social and aesthetic growth thus establishing art as a crucial aspect of this growth at a pre-school level. Furthermore by discussing the creative relationship which a child has to each area, this informs an analysis of the practice of facilitation and environment, hence the qualitative evaluation of the different schools.

To Smolucha and Smolucha (1986, p.4), the essence of creativity and the creative process is the "collaboration of imagination and thinking concepts", hence the process enables the child's abilities in problem solving and social interaction. Therefore scientific creativity and an artistic development both need the child's imagination to ground them (Smolucha & Smolucha, 1986). This opens the way for the creative theorists to analyse creativity and its benefits within the broader context of development. Numerous creative theorists have formulated the creative process in an attempt to clarify it. Sheaffer (2005, pp.222-223) describes creativity as the formulating of a "novel idea" with "innovative solutions" suitable to the problem and valued by others and further explains this as "divergent thinking" which is a cognitive skill but different from general intelligence. Feinstein (2006, p.4), in his book 'The Nature of Creative Development', wrote that the creative development process can be broken down into three steps:

- the formation of a creative interest, including conception of the interest
- the process of exploring the interest and developing it creatively, the defining and execution of projects growing out of its development
- producing the creative works and contributions

In the latter formulations of the creative process there are subtle differences in the point of view, however a common underlying three- staged thread is identifiable.

Herbert Read (1893-1968) was a poet and critic of art and literature. His book *'Education Through Art'* (1949, p.320) was a response to the prevailing geometric and positivist view of art and was based around his thesis believing that "education is to foster the growth of what is individual in each human being". He stressed that aesthetic development is a fundamental part of education and so the arts should be a basis of education. In Read's (1958) study of children's images he discovered eight distinct categories, all transcending age or stage development, as described by Thistlewood (1994, pp.375–90). These were reorganised into the four composite categories of mature creativity - 'realism: thinking'; 'superrealism: feeling'; 'expressionism: sensation'; and 'intuition: constructivism'. The division between each two is broadly between geometric and organic standpoints. Wood and Attfield (2005,

p.84) tell us that "creative learning occurs when children have the freedom to express ideas and feelings, explore and experiment through art" thus enhancing their senses, making them feel that they have achieved and giving them a better sense of the world they live in.

Lev Vygotsky a Russian theorist (1896-1934) stressed the role of imaginative play in the creative process and from thence, the importance of interaction with adults and peers. This approach is in marked contrast to Piaget's whose work was based on the internal process of the child's cognitive development, Vygotsky focused on the impact of social factors. Vygotsky (1978) claimed that a child's mind grows through constant contact with other minds so focusing on the social world of people and their social interactions. His theory of the 'zone of potential development' is useful in analysing facilitation since it gives such central importance to the role of the adult. In it he explains that by interaction with the children the adult allows them access to a zone of potentiality that would otherwise be beyond their reach. It must be emphasised here that he is not talking about instruction but simple interaction. To understand these channels of creative processing, adults must expose children to a range of social situations as each experience is a learning curve (Smolucha & Smolucha, 1986). Vygotsky placed interaction at the very heart of human development and defined intelligence itself as "the capacity to learn through interaction" explains Feinstein (1999, p.10). In his studies of language development Vygotsky observed that children start to draw things and then progress to drawing speech and that this happens through communication and interaction with people (Beaver et al. 1991). Children who develop this creative communication are curious, ask lots of questions, analyze their experiences and enjoy imaginative and creative play activities (Shaffer, 2005; Smolucha & Smolucha, 1986, 2006). From the latter alone it follows that children's creative development through art impacts positively on many of the growth areas mentioned in the introduction to this research.

Through Read's (1949) separation of the organic and geometric standpoint and the division between Piaget (1929) and Vygotsky (1978) regarding the importance of socialising elements as opposed to concepts, there can be detected the formation of two schools of thought within child development and creativity through art, embodied

by Lowenfeld and Brittian (1987) and Gardner (1980) respectively. Lowenfeld and Brittian (1987, p.37) hold that art development is not affected by outside influences but passes through "predicable ways" at "definite stages". However, Gardner (1980) states that factors such as social and emotional growth affect artistic development which peak in early childhood fall off again after 6 and ascend again in teen years.

Viktor Lowenfeld was born in Austria; he grounded his views of the development of creativity through the stages of growth in art, using the psychoanalytic school of psychology and its evidence of social, aesthetic, physical, intellectual and emotional growth and its reflection in the art of children:

- Emotional growth – as a child may repeat drawing a symbol to perfect it, the attentiveness of the movement supports emotional growth.

- Intellectual growth – a child's drawing with reference to the number of details in it can reflect intellectual ability. Drawing tests have been used to assess a child's intelligence, asking them to draw 'a man' and scoring on the amount of detail given within the typical age related picture.

- Physical growth – this is shown by the redefining of marks into lines and the physical movements portrayed, thereby showing the child's awareness of body imagery.

- Perceptual growth – visual observation towards colour/form/shape is most encouraged in drawing but also auditory experiences when included in the pictures.

- Social growth – the child's first recognisable picture is usually a person. This means of viewing themselves and the communication of a picture is a social expression rather than a personal one. By drawing themselves they are becoming socially conscious and more aware of their world and their place in it.

- Aesthetic growth – this is a development of organized thinking, feelings, perceptions and the visual or verbal communication of their expression to others. (Lowenfeld & Brittain, 1987)

Lowenfeld's (1947) stages of artistic development are: the scribble, pre schematic, schematic and drawing realism. Along this journey of artistic and creative development he describes the early years as the stage when the process of creation of the visual art is the most significant thing. Lowenfeld and Brittain (1987 p120) tell us that 'children learn in an active way rather than a passive way' and their development in the early years is vital and art experiences can contribute to this. Lowenfeld's book '*Creative and Mental Growth*' (1947) became the single most influential textbook in art education during the latter half of the 20th century, which explains a range of elements to define creativity and creative thinking. Three common components of creative thinking are: fluency - the ability to produce a large number of ideas, flexibility - changing from one way of thinking to another, originality - thinking up unique ideas or solutions (Lowenfeld & Brittain, 1987). In art, creativity is intrinsic, finding methods to express an emotion; it is important to develop creativity at a young age as attitudes once established tend to continue say Lowenfeld and Brittain (1987). The authors further believe that "painting is in itself a creative learning process in which each youngster develops a unique method of organisation, elaborates on his own theme, and derives satisfaction in the process" Lowenfeld and Brittain (1987, p.P85).

Howard Gardner is a research psychologist studying the cognitive capacities most central to the arts. His proposed cognitive approach to creativity is by working through Piaget's psychologism and structural symbology. Gardner's (1993) theories of multiple intelligences have given rise to many educational texts on creative thinking and the combining of thinking skills in the interests of preparing students for life-long learning (Grierson, 2006). He tells us that when children have an art experience, the idea of creating and reflecting brings together their knowledge to a higher understanding which developed through the integration and synthesis of productive, perceptual and conceptual knowledge Gardner (1990). "Production, perception and reflection" are three elements necessary for art education and

creativity (Gardner, 1990, p.45). Furthermore children should be provided materials and encouragement to use their imagination, creativity and knowledge of their affective life in an environment visually rich, as he believes meaningful projects bring together artistic learning and production through the development of looking at art works: their own, their peers and significant other artistic work.

Therefore what these theorists articulate is that the way child creativity is nurtured is pivotal in their later development. The different philosophical responses to the question of what a child is doing when manipulating symbols and how we should respond to this in order to foster their various potentials necessitate hard choices, which consequently affect every area of the child's development. There are many positions to be held between these points of view which therefore underpin different pre-school practices and curricula.

2.3.8 Conclusion of children's creativity in theoretical context

2.3.8.1 Creative environment

The creative environment should provide a "high quality programmed" area structured spaciously with a wide range of toys, equipment, various materials and partitioned sections of the room (Essa & Burnham, 2001, p.70). A selection of accessible art materials should be made available with room beside them to encourage investigation. The environment should be visually rich with opportunities of exposure to famous art works so providing the materials and encouragement for children to use their imagination, creativity and knowledge (Gardner, 1990). The overriding importance should be the support of children's cognitive, perceptual, creative, social and emotional learning and development (Pringle, 2000). The structure of the art space in a creative and learning area should encourage children to learn in meaningful projects and also exchange information while drawing, thus bringing together artistic learning (Gardner, 1990; Kess, 1997, 2003; Hopperstad, 2008). Similarly in preparation the environment must support the object of a particular exercise where children can communicate while drawing so making it a more creative experience as children can benefit through the support and meaning they gain from peers (Dyson,

1989; Hopperstad, 2008). The environment should further offer some space for self reflection, quiet concentration and imaginative exploration to express their ideas. Thus if creativity and learning are to be developed the structure of the art space and the objective of artwork must be environmentally active to support creative ideas, creative self expression and exploration (Eisner & Ecker, 1966; Lowenfeld & Brittain, 1987; Eglinton, 2003).

2.3.8.2 Facilitation

There is no place in the research where the contrasting points of view held by theorists along the organic/geometric division has more relevance, as the supporting of these different points of view makes for massive differences in the way that facilitation is prescribed. Vygotsky (1978) was a strong proponent of the view that social aspects are of primary importance in child development whereas Piaget (1929) would have stressed innate cognitive abilities of the child in their development. Each sees child development as either motivated internally or externally. There are many points of view that occupy the middle ground between these and corresponding subtle differences in how facilitation is done.

Observation is vital to provide insight as to how the child engages and learns during the art experience. The adult must look at all aspects of development through the use of the art materials thereby assessing: how the child uses them; are they ready to learn a new skill; how the child turns expression into form; and are they satisfied with their work (Gardner, 1990; Eglinton, 2003). The most supportive art facilitator is a teacher who gives encouragement, feedback, different suggestions and makes the children feel their work is worthwhile. The adult must place value on the children's work by using wall displays and personal folders so offering the child space for reflection and allowing them to make connections in learning. Similarly the provision of materials and space give the children freedom to express through imagination, exploration and experimentation (Lowenfeld & Brittain, 1987). Since drawing is a problem solving activity which is sensitive to instruction it follows that creative development is not aided through all teacher directed art, hence there must be less direction and more process for further creativity to develop (Barrett & Bridsen, 1983; Van Sommers, 1984; Lowenfeld & Brittain 1987). The facilitator must remove themselves from the

free art space and only reply when spoken to thus enabling the children to make their own decisions. In order to develop higher levels of thinking and promote cognitive, social and emotional development they should promote peer interaction and allow the children to choose their activities and play mates (Lowenfeld & Brittain, 1987; Eglinton, 2003; Epstein 2002, 2009). The facilitator must respect the child's work, provide them with imaginative space and let them develop at their own pace through the provision of art materials and quiet reflection. The adult should help guide the children to investigate, communicate, discover and thus lead them through their "enthusiasm to make an art experience inspirational" (Eglinton 2003, p.75). The adult should also promote some dialogue between child and adult only when appropriate but not interrupt or disrupt the child's concentration (Matthews, 2003; Gallagher, 2004).

2.3.8.3 The child's experience during art

The child should be using their senses by movement and exploration in an art experience for both sensory learning and development (Lowenfeld & Brittain, 1987; Eglinton, 2003). The focus of their body's movements should be through sound, smell, touch and taste thus becoming more aware of their own instinctive behaviours as the "source bank of stimuli" (Larkin, 1981, p.9). The child needs freedom of movement and open communication to develop their social skills, emotional skills, cognitive development and to be stimulated by interactive relationships through dialogue to increase learning (Matthews, 1999; Bamford, 2005; Burke, 2005; Epstein, 2009). They will be communicating using the art experience to actively develop listening skills, group problem solving skills, and to become more aware of their environment and their place in this (Nutbrown, Hannon & Morgan, 2005). A child communicating while drawing should be able to share the feelings of struggling, thus children can work as a collective (Dyson, 1989).

2.3.8.4 Learning outcomes

Art education offers experience in working with art materials which accelerates the developmental levels in children's drawings and which support the element of reflection through production and perception (Gardner, 1990). For the child, the value

of an art experience should be in the process (Lowenfeld & Brittain, 1987). Learning outcomes are seen in the following areas:

Creative development in expressive and artistic learning is supported by the pre-school when it assists the development of three common components of creative thinking: fluency or the ability to produce a large number of ideas while understanding that art is a way to express these ideas; flexibility or the changing from one way of thinking to another so overcoming obstacles to form expression; originality or the thinking of unique ideas and solutions using art's inventiveness of expression (Lowenfeld & Brittain, 1987; Eglinton, 2003). To best develop creative learning children need to have the freedom to express and communicate ideas and feelings, to explore and experiment through art materials using imagination to respond to experiences (Wood & Attfield, 2005). Pre-school should help the children make sense of the wonder of the world around them, develop a sense of self through free art and encourage the ability to give form to expression, aiding problem solving (Arnold, 2003; Bruce, 2004).

Social and Emotional awareness is supported by the pre-school developing the social and emotional skills needed in learning which are: listening, flexible problem solving and task persistence. These should be nurtured by encouraging children to take turns leading art projects and allowing others to lead (Eglinton, 2003; Epstein, 2009). The key elements in social and emotional development are positive self identity, emotional honesty and self regulation. Appropriate self expression and collaboration should be supported during an art experience to teach children the responsibility to treat their own art, art of others and media with care (Eglinton, 2003; Epstein 2002, 2009). Art activities encourage children to identify with other children's actions through verbal and visual communication so developing their knowledge of what it means to be a peer (Lowenfeld & Brittain, 1987; Coates & Coates, 2006).

Perceptual and cognitive development is encouraged through the child engaging in discovery and investigation of their world using their senses to extract information and by interaction gaining a deeper insight into new ways to visualise their experiences (Eglinton, 2003). The creative experience should support observation of

nature's role providing inspiration, colour, form, space; awareness of their variations thus helps the children to notice details and to develop and decode simple symbols (Lowenfeld & Brittain, 1987; Eglinton, 2003). Perceptual discrimination should be progressed with art materials by building on prior information and by developing the ability to understand 'visual relationships' (Eglinton, 2003; Larkin, 1981). The development of discriminatory skills are part of the cognitive process so the art experience should support reflection through observation, feelings and talking about their work and artistic process (Lowenfeld & Brittain, 1987; Gardner, 1990; Eglinton, 2003).

Technical skill development supported in the art experiences should be varied and appropriate to age so building on previously learnt skills and competently learning the use of at least one medium (Chapman, 1978; Lowenfeld & Brittain, 1987; Gardner, 1990; Eglinton, 2003). Though no formal artistic training is needed at pre-school age they should be able to handle a selection of materials with dexterity (Gardner, 1990; Eglinton 2003). The pre-school should help the children use two and three dimensional media inventively and with purpose, choose suitable media to the task at hand and consistently develop new skills and techniques (Eglinton, 2003).

2.4 International pre-school policy

The Organisation for Economic Cooperation and Development (OECD) through its report on Ireland (OECD, 2005) made the point that Ireland's pre-school regulation seems weak in comparison to other countries and does not include sufficient incentives to train, employ qualified staff or continually improve expertise. A study of international policies and practices and research relating to quality in early childhood care and education were completed in 2004 and its findings were published in the book *'Making Connections'* (Schonfeld, Kiernan & Walsh, 2004). The findings were more of a general over view of polices rather than detailed inclusion of the curriculum. These were as follows: Sweden has a single educational framework for the child's educational life starting from pre-school to first and second level of education so improving coordination between different bodies. Sweden, New Zealand and Norway have made this broad curriculum work through pre-school and the

Nordic countries have developed in-services systems of training. Northern Ireland uses the Curricular Guidance for Pre-School education which is process based (Schonfeld, Kiernan & Walsh, 2004). In Germany the pre-school education is instead part of the social welfare system and is the responsibility of the local authorities. The child's space for exploration and "free choice" seems to be emphasised rather than group activities (Mooney et al. 2003, p.75). In England there has been much structural and curriculum change in early years' education with many national initiatives to raise the profile of the arts in education, for example Artsmark and Creative Partnership. In local authority areas there has been further development over the last few years a new learning framework from birth to five years was introduced (Mooney et al. 2003). The Early Years Foundation Stage composes of Sure Start which focuses on families and children under four and the Curriculum and Guidance Foundation Stage which includes creative development as one of the key curriculum areas.

It is to be hoped that studies such as these will inform the Irish government's eventual response to the criticism offered by The Organisation for Economic Cooperation and Development by bringing enforceable standards for the training, improvement and employment of childcare workers. As will be seen in the next subsection, Article 5 which was recently introduced to legislation allows for the enforcement of some of these measures but this has yet to be implemented.

2.5 National pre-school policy

The authority to act on national pre-school policy lies within a body of government agencies. The Office of the Minster for Children has responsibility for working with the Early Years' Policy Unit along with the Department of Education and Science. The Childcare Act introduced the legislation on quality in early childhood services by providing arrangements for the notification and inspection of pre-school services by the Health Boards. This caused a set of standards to be placed called the pre-school regulations and these are carried out by the pre-school inspection team. Below is an overview of the policy and legislation developments within Ireland:

Figure 2. Table of Irish childcare policy and legislation development.

The Child Care Act (1991)
The Child Care (Pre-School Services) Regulations (1996, 2006)
United Nations Convention on the Rights of the Child (1989), ratified by Ireland in 1992
The National Children's Strategy (2000)
The National Play Policy (2004)
Síolta, the National Quality Framework for Early Childhood Education (2006)
Legislation on education, and the needs and rights of children with special educational needs (1998, 2004, 2006)
Article 5 of the revised Regulation (2007)
Aistear, The Early Childhood Curriculum Framework (2009)

Historically within the Childcare (Pre-School) Regulations the only enforced regulations were on the quality of condition in premises, staff ratio and health and safety. There was no duty to inspect the quality of staff qualifications in place or the curriculum in use. However, within Article 5 of the revised legislation the inspection team have a wider remit to enforce regulations. Article 5 now states that all childcare services must ensure the well being of each child through their development and learning by provision of appropriate opportunities of interaction with materials and equipment offering experiences and activities which have regard to their age and stage and the child's cultural context.

The Office of the Minster for Children (OMC) was established in 2006. Its central aim is to improve quality childcare service infrastructure. The National Childcare Strategy defines quality in a childcare setting through the provision of enhancing experiences for children which supports positive interactions between children and adults (Department of Justice, Equality and Law Reform, 1999). The training of childcare workers in Ireland has become the focus of quality childcare service development in recent years. This is resulting from research highlighting the importance in which quality pre-school services play in preparing children for school entry and the benefits for the child and society (DES, 2004b). In 1996 the EU Network Commission on Childcare recommended that 60% of childcare workers in

member states be trained by 2006. They also set down the required training as a minimum of 3 years full time, undertaken after 18 years of age. Ireland has greatly increased its numbers of trained childcare workers with the roll out of FETAC Level 5 and 6 courses (DES, 2004b). These courses are usually the equivalent of one year full time study and they make up the most common childcare qualifications in the state. However, the introduction of the Early Years Degree courses in various Institutes of Technology represent the only courses that meet the European objective of being a minimum of 3 years full time (Kiernan, 2003). In this way, the National and European view seems to be to train childcare workers to this level in the long term. In order to reach that long term goal the FETAC qualifications remain as a vital method of starter training for childcare workers that do not have a background in education and for childcare workers who are already working in the field.

The National Council for Curriculum and Assessment (NCCA) have just finalised a new curriculum framework for early learning for all children aged from birth to six called Aistear. They published *Aistear: The Early Childhood Curriculum Framework* outline in October 2009. This is to complement other guidelines and 'help bring greater continuity and progression in children's learning and development' (NCCA, 2009). To facilitate this, efforts are underway for Aistear to collaborate with *Síolta* the National Quality Framework for Early Childhood Education (2006), the Child Care (Pre-school) Regulations (2006) and the Primary School Curriculum (1999). The purpose of Aistear is to provide challenging and enjoyable experiences so children can grow and develop as competent learners. It is to be used by all adults, teachers and parents who support children's learning including at home and in infant classes in primary schools. The four elements within Aistear are:

- Guidelines for good practice looking at partnership with parents, play, interactions and assessment
- User guide giving practical information on Aistear
- Key messages from the research sourced to construct Aistear
- Principles and themes highlighting children's development and learning

Aistear focuses exclusively on children's learning and development and provides significant potential to support the development of practice for all adults who care and educate children thus to ultimately benefit children. The underlying principles of the Aistear put emphasis on how children develop and learn through: equality and diversity, relationships, parents family and community, the adults' role, the child's uniqueness, children as citizens, the learning environment, communication and language, holistic learning and development, relevant and meaningful experiences and active learning (NCCA, 2009). In its foundation Aistear promotes that all learning is connected and different features of development and learning take place at the same time. It outlines the content of children's learning and development through using the four themes, well-being, identity and belonging, communicating and exploring and thinking.

2.6 The Mainstream System

2.6.1 Methodology

The basis of the content of the Mainstream methodology is sourced from a range of developmental theorists. As mentioned earlier, Piaget's theory of cognitive development is a major influence in the way the curriculum is taught to childcare workers within Mainstream. Its basis is the understanding that children go through pre-defined stages of development and learning. The Creativity component uses these stages to detail the child's motor and cognitive abilities through art materials. An overall holistic approach is taken in order to supply a child centred pre-school education (Beaver et al. 1991; Sheridan, 1997; Meggitt & Sunderland, 2002). The methodology within private or government childcare services is delivered through recognised educational childcare training and courses such as FETAC Level 5 Childcare and the Early Childhood Care and Education degree. Mainstream childcare services are further supported through the National Quality Framework, Childcare Organisations and the new Early Childhood Curriculum Framework, detailed below.

2.6.2 Teacher training and pre-school content

The presentation and facilitation of art to children in the mainstream pre-school, in text book theory, is very clearly defined from the FETAC curriculum and Early Childhood Care and Education degree. The content of these qualifications which follow are indicative of the vast majority available:

2.5.2.1 FETAC (NCVA) Childcare Level 5

Course Content:

- Child development
- Early Childhood Education
- Working in childcare
- Care of the special child
- Caring for children aged 0-6yrs old
- Art and Craft for childcare
- Computer Applications
- Information technology skills/data entry
- Communications
- Work experience

Certification: FETAC (NCVA) Level 5 Award (DCHSC)

- First Aid Certificate
- Duration: One year full time study

(Monaghan Institute of Further Education and Training, 2010)

2.5.2.2 Early Years Degree

The degree has been designated as a recognised qualification for the post of *Early Years' Educators*. This degree focuses on the content of care and education within pre-school centres and other related issues in childcare. It is designed to be inclusive of perspectives from care and education provision from birth to six years. The degree

identifies and promotes best practice in caring for and educating young children and provides a strong theoretical underpinning of such practice. It is organised on a modular basis. Each module requires substantial practical, work-based element upon which reflection and analysis are founded. The Degree has distinct themes:

- Coming to know the world through play;
- Children's Health – minds and bodies;
- Personal and Professional Development;
- Research and Fieldwork.

Throughout the four years, creative studies are taught to the students covering drama, music and visual arts.
(IT Sligo, 2010)

2.6.3 Síolta

In addition to qualifications, in-service and continuous training are deemed to be important for childcare workers. This is also reflected in European and Irish Policy and is promoted as a major contributor to quality service development. In implementing this Síolta is already being rolled out through the ongoing national plan, where each County Childcare Committee will set up training under Síolta to childcare services. This forms the basis of much of the training of childcare workers within the state. Síolta has 12 Principles, these are as follows: Síolta places significant value in early childhood as a distinct time in life that must be nurtured, respected, valued and supported in its own right; The children first principle focuses on the child's individuality, strengths, rights and needs which are central in the provision of quality early childhood experiences; The parents who are the primary educators of the child and have a pre-eminent role in promoting her/his well-being, learning and development; Relationships which should be seen as responsive, sensitive and reciprocal thus being consistent over time, are essential to the wellbeing, learning and development of the young child; Equality should be seen as an essential characteristic of quality early childhood care and education; Síolta state that quality early childhood settings acknowledge and respect diversity and ensure that all children and families

have their individual, personal, cultural and linguistic identity validated; The physical environment of the young child should be understood as having a direct impact on her/his well-being, learning and development; The safety, welfare and well-being of all children must be protected and promoted in all early childhood environments; The role of the adult should be the fundamental provision of quality early childhood experiences; Teamwork within the provision of quality early childhood experiences requires cooperation, communication and mutual respect; Pedagogy in early childhood is expressed by curricula or programmes of activities which take a holistic approach to the development and learning of the child and reflect the inseparable nature of care and education; And play should be placed centrally to the well-being, development and learning of the young child (CECDE, 2006).

2.6.4 Childcare Organisations

There are many organisations in Ireland working and offering guidance for childcare workers, parents and children in the main stream pre-school setting and some of these childcare organisations have initiated "Innovative quality assurance initiatives" (Kiernan, 2003 p.6) Most, if not all, have helped develop and create a wider understanding of the benefits of art in the pre-school by offering arts and crafts workshops which have provided a wider range of art class skills and have created a more confident childcare worker in this setting. Representatives from Aistear are in talks with a range of supporting childcare services for the new curriculum framework to assist a more value centred approach in the childcare settings.

The National Childcare Nurseries Association

The NCNA have set up Arts and Crafts with Under 5's classes nationally and they will train and provide the childcare worker with many ideas for artistic and creative development. They state 'it is important in the childcare setting that expressions of creativity are encouraged and accommodated' and believe in process based arts for children, more than the product, (NCNA, 2007).

The County Childcare Committees

The CCC have been individually organising art and craft training for the childcare workers in their counties using community artists to develop appropriate, new and interesting art activities for children. They have also employed VEC tutors who use the FETAC Art and Craft modules to progress the childcare workers' creative art ideas based on Piaget's view of cognitive development.

The Border Counties Childcare Network

The BCCN have been collaborating with the Northern Ireland Council for Curriculum for Examinations and Assessment and have been given permission to use their 'Curricular Guidance for Pre-School Education'. They say it should be used as a guiding example for curriculum in the pre-school setting for children to enjoy art and be free to extend their creativity as they wish, also to be encouraged and stimulated by the adults.

Barnardos

The Barnardos National Children's Resource Centre is a training and consultative source for parents, carers and practitioners. They offer training events, a library of relevant childcare books and new policy updates on childcare. The many workshops they help provide include art and crafts, drama or music, with the focus on the child's development through these areas.

2.6.5 Mainstream art theory

2.6.5.1 Environment

Within the Mainstream system the environment should support creativity through the provision of space for creative and stimulating activities (Bruce & Meggitt, 2005). The creative environment should offer a wide range of materials for children's explorations and experimentation (Beaver et al. 2008). The art mediums should further support the children's creative ideas through opportunities to self express. Areas of provision should be set up to offer play through: dough, collage, imaginative and dramatic play, music, and drawing and painting (Bruce & Meggitt, 2005). Broad advice is given for the environment provided within Mainstream art. It is seen as

affecting the scope of children's creativity. A stimulating environment where they can experiment and explore will give a wider range of opportunities and developmental learning.

2.6.5.2 Learning outcomes

Creativity should be seen as important for the child's development, therefore supporting elements of learning through art to develop the child's unique imagination should be part of every art experience (Beaver et al. 1999). The way in which new materials are introduced to children within a supportive creative space should stimulate their ideas (Bruce & Meggitt, 2005). Painting experiences offer skills in creative and cognitive learning, thus enabling a child to work through problems, think of size and shape and properties of elements and colours. The children should be active in the creative process to help them develop their ideas with imagination playing an important part in this, by being allowed to choose colours and to represent their ideas in their own way (Beaver et al. 2008). Developing concentration skills and task persistence by finishing what to do is a key learning aspect while motor skill abilities should be encouraged through the use of suitable scissors, paint brushes, crayons and colouring pencils (Beaver et al. 1999). The use of their senses through exploration of art materials will make connections in learning. As well as individual work children should be given meaningful art projects as a group so developing their social and emotional skills.

2.6.5.3 Facilitation

To foster creativity the role of the adult is therefore not to ask the child what is the picture but to ask them to tell you about it (Beaver et al. 1999). Adults should display children's work which will indicate it is valued so they can thus learn the value of it and of their peers also. Teaching and education of art should be hands on facilitation leading them through guidance to investigation. The focus is on process based art rather than the production or reproduction (Bruce & Meggitt, 2005). The childcare worker should start the art process with something the child already knows and develop the art workshop from this point. Engage children through a theme of the

month: a colour, a season, an animal, using books to bring together different aspects of learning and leading into a creative art process (Beaver et al. 1999).

2.6.5.4 The child

The child should be free to use their imagination, explore their creative ideas and use self expression during the art process, as well as developing technical skills and dexterity while experimenting through a wide range of materials (Beaver et al. 2008). The children can be encouraged to use all their senses while exploring the materials and objects to engage experimentally with. They should be making connections in their learning from the development of themes to enlarging these further with their own ideas. During an art experience they can interact with their peers engaging in social and emotional skills (Bruce & Meggitt, 2005).

2.6.5.6 Conclusion

Mainstream childcare education has been influenced by Piaget's theory of cognitive development and children are being educated through the idea of stages of development. A key aspect of learning through art is based on children's concentration skills, technical skills and overall cognitive development. The environment through the role of the adult can provide many materials for sensory exploration and experiment through their creative ideas. They should be sociable within process based art experiences to develop relationships however, still be provided space for self expression. The value of their art is shown through wall displays to support another key learning aspect, that of making connections through visually developing themes.

2.6.5.7 Summary

To recreate the mainstream approach to art the following should be incorporated:

- A process based environment through exploration and investigation (Bruce & Meggitt, 2005)

- Use as much variety of materials as possible (Beaver et al. 2008; Bruce & Meggitt, 2005)

- Lead the art class with something they already know so making connections in learning with guidance towards investigation (Bruce & Meggitt, 2005)

- Encourage dialogue with the children using questions like such as "can you tell me about this picture?" (Beaver et al. 1999)

- Facilitate art where the children can learn about the properties of water, paints and how to control these furthering their technical skill (Beaver et al. 1999)

- Learning is focused on cognitive and creative development (Beaver et al. 1999, 2008)

2.7 The Steiner Waldorf System

2.7.1 Methodology

Rudolf Steiner (1861-1925) established the first Steiner Waldorf School in 1919 in Stuttgart, Germany. The Waldorf Company employed him to form a school for the children of their employees. He based this upon the principles from his book '*The Education of the Child*' (1907). This practice has become known as the Steiner-Waldorf method. Steiner had received a Ph.D. from the University of Rostock, his thesis was, "The Fundamentals of a Theory of Cognition." His major influences were Goethe and Schiller (Stockton, 2003). He believed that the main object of thinking was 'ideas' and that the fundamentality of an artistic element should be introduced into learning thus making education a solid living form. The Steiner Waldorf school's educational philosophy is his particular view of "what constitutes learning, achievement and educational development" explain Woods & Attfield (2005, p.4). Steiner was concerned that the growing production of machine-made goods and media that dominated culture would result in the apathy and many other social problems. Steiner Waldorf kindergartens discourage media influences in the child's

life, for example computers and television, as they believe these to be detrimental to the child's cognitive development. He believed arts and crafts to have a central role in the class room which would involve children working with their hands, using natural materials and so "experience with their hands the living beauty of the natural world" (Iannacone, 2001, p.2). Steiner argued that aesthetic values do not just come from fine arts but from human activities and creations and are primary to human development (Barnes, 1991). He further understood that the attitude, expression and voice of the teacher is often more important than what is being taught as children learn from example. He believed that students who had worked through their education using colour and form had not only worked creatively but had strengthened their emotions and had practised the exercise of will (Barnes, 1991).

Steiner believed in the "moral effect of colour" posited by Goethe as the "sensory moral effect" states Muller (2004, pp.8-9) - yellow nearest to light, blue giving the impression of cold but accompanied by light, and red having gravity and grace. Steiner Waldorf kindergarten uses fairy stories and traditional festivals to provide cultural experiences and develop the morals of right and wrong, so stimulating a mental mobility which can lead to richer and more versatile concepts and feelings (Muller, 2004). Steiner and his teachers view education in itself 'as an art'. Hence, education is not just about the child's mind but involves educating their hands and heart inclusively (Schweizer, 2006). The child will be learning about ecology, caring for the environment, and the toys will be made out of wood to instil this further. Through their teaching practices they understand and expect that the child will use their hands and fingers to try communicate their inner feelings and use drawing and painting as a tool for working through emotions and for self-expression (Oppenheimer, 2007). They do not introduce academic learning to the kindergarten children as they believe that the child is not able or ready for work which demands such concentration or intellectual reasoning. In his book '*Education Towards Freedom*' (1976, pp.40-41) Steiner states that education should support children by allowing them to express feelings through artistic activities. This interplay between physical and psychic causes changes in the body. Thus giving the children free reign to express can bring about an opening of soul experiences.

Bruin and Licthart (2004) explain that painting is part of the weekly rhythm of the pre-school. There are three fundamental R's in the Steiner Waldorf kindergarten: rhythm, repetition and reverence. To be thankful and give reverence to nature is a daily activity. From the repetition and rhythm of seasonal changes, rhythm within activities, to the daily rhythm and repetition which is part of its routine, Steiner Waldorf kindergartens believe this will provide children with security (Oppenheimer, 2007). All activities are set in a weekly rhythm to give the child a consistent routine with many things to embrace (Bruin & Licthart, 2004). They place much emphasis on creative self expression and the development and growth that is gained by the child through art, free play and music.

2.7.2 Teacher training and pre-school content

The Steiner Waldorf training incorporates a developmental integrated curriculum. This is shared by Steiner Waldorf schools around the world in a common pursuit and commitment to Steiner's principles and philosophy towards a specific education (Woods & Attfield, 2005; Oppenheimer, 2007). The schools should be self governing and therefore teachers and parents and an administration aid should committee the schools resources. Not many of the Steiner Waldorf teachers hold state recognised qualifications to teach but a majority hold Steiner Waldorf teaching qualifications. Woods and Attfield (2005, p.16) state that "each Steiner Waldorf school is an autonomous institution and is not required to follow a prescribed curriculum" but follows that with "there is a great deal of consistency amongst the schools in terms of curriculum they offer".

Teacher training foundation course content

- Philosophy, anthroposophy and educational psychology in Steiner Waldorf early years' education and childcare.
- Child development, curriculum, teaching method and culture
- Contemporary early years' issues, professional practice and comparative studies.

- Practical and theoretical work with independent research relevant to reflective practice.
- The arts for self development and in practice
- Work-based learning, teaching and observation
- Independent research project

The aims and objectives of the Steiner Waldorf teachers are to:

- Provide opportunities for children to be active in meaningful imitation in an integrated learning experience
- Encouraging personal, social and moral development
- Encouraging learning through creative play and supporting physical development
- Encouraging children to know and love the world
- Providing a safe and child-friendly environment while working with parents
- (Rawson & Richter, 2000, pp.32-33)

2.7.2.2 Kindergarten Content

Steiner Waldorf kindergartens have divided overall developmental stages into seven-year stages, which are similar to Piaget's (1929). Early childhood learning, which is birth-six/seven years, is sensory based learning through practical activities and should be mostly experiential:

Waldorf kindergarten schools approach early childhood learning through imitation and learning by example

A classroom environment that is homelike with productive and practical work in which children can take part in i.e. baking

Outdoor free play with natural materials from the environment.

Supporting the intellectual, physical, emotional growth and development of the child

The development of oral language is learnt through songs, poems and movement games.

Eurhythmy is a subject which is required from all the children in all the classes. This is an art of movement created by Steiner to help the harmonious development of body, soul and mind which is performed through music or poetry.
The early childhood Steiner Waldorf education emphasis is on children experiencing the rhythms of the day, season and year, "focus on rhythm, rituals, symbols and ceremony..." (Wood & Attfield, 2005, p.5)

2.7.2.3 Kindergarten general principles

- Kindergarten children are aged between three and six.
- There are five morning sessions each week.
- The session will last about four and a half hours.
- Teaching is lead by example and imitation of the teacher.
- Free play is recognised as a vital learning time through self motivation.
- The annual pattern of seasons is used as subject matter in the children's work, play and creativity
- Emotional, cognitive and social development and growth are of equal importance.
- Rhythm, reverence and repetition establishing continuity on the healthy development of memory

  (Rawson & Richter, 2000, pp. 32-33)

2.7.3 Steiner Waldorf art theory

2.7.3.1 Environment

The environment should be supported through highest quality natural products and art materials so reinforcing the importance Steiner placed on these considerations (Muller, 2004). The classroom must be artistic in all areas, from creative manmade wall decorations to soft muted colours (Grunelius, 1996). Art materials are all placed within the room and ready to use upon the adult's instruction (Grunelius, 1996). There should be a nature table to reflect the changing seasons with all the elements of nature which might be referred to before the art experience. The environment for art time

should be set up in a large communal table with individual workstations and the provision of individual art materials (Muller, 2004).

2.7.3.2 Facilitation

The adult should lead by example allowing children to follow through imitation and support the ethos of learning by example (Junemann & Weitmann, 2006). The adult does not need to provide an academic lesson but will progress through the method of 'imitative faculty' (Oppenheimer, 2007). The teacher should know through experimentation how to achieve the tone of colour they wish when mixing paints, thus working quickly for the children. The teacher will have the art area ready when the children arrive in the morning and will be painting or drawing at their own board so they will naturally go to him/her, watch and want to imitate (Bruin & Licthart, 2004). Children are encouraged to do as much as possible themselves and if a child is displaying no interest in painting or drawing the adult can engage them through a story (Grunelius, 1996). When the child is involved in an activity the adult, if possible, should not correct them, or draw their consciousness from what they are doing (Junemann & Weitmann, 2006). The adult lets the children create whatever they wish on their page and not interrupt unless spoken to.

2.7.3.3 Learning outcomes

Children's art time, be it drawing or painting, should be at the same day and time each week developing through a consistent routine (Grunelius, 1996). In Steiner Waldorf schools children learn how colours change when they are mixed and develop an understanding of how different colours express and evoke emotions (Bruin & Licthart, 2004). They should be using self assertiveness and reflection through mixing colours with a sense of symmetry and balance. The water colours are: yellow, red and blue, used two at a time, and as they are 'water' colours, provide no solid lines (Bruin & Licthart, 2004). The children should be allowed to express themselves through their paintings and choice of colours as they 'become that colour from the inside out' (Oppenheimer, 2007). Fantasy plays an important role. The children's works should not be put up on the walls or displayed for fear this might be seen as judging the child's work and no assignment is given for painting or drawing thus children are free

to create, so offering space for self expression and exploration without explanation(Grunelius, 1996).

The fundamental skill learnt through art time is the purposeful sequence of steps as this is seen within Steiner Waldorf as the foundation for socialisation skills through the interactions created from the sharing of a purpose (Oppenheimer, 2007). This unconscious learning from painting and drawing should further help the child develop, by engagement through discussion, hence children are encouraged to discuss their own drawings and paintings when completed (Junemann & Weitmann, 2006). The children are helped further to 'read' their pictures to the others and make up stories regarding them, thus promoting the development of verbal skills by using their own words. The many colours from nature and its seasons are shown and discussed during outdoor free play. The children should then be encouraged to reflect those colours in their paintings or drawings to reinforce memory (Bruin & Licthart, 2004). The movements through painting and drawing should be seen as a holistic experience, aiding development and learning as Steiner believed "the education of the hand is the aid to healthy brain development" (Oppenheimer, 2007, p.28).

2.7.3.4 The Child

The children in Steiner Waldorf education should share the same space with peers of all ages thus an older child can lead by example (Bruin & Licthart, 2004). All should help preparation at art time with older children setting up and cleaning away and the younger children mixing the colours, therefore all are being careful and industrious and treating the materials with reverence (Oppenheimer, 2007). The child has freedom within the page to create what they wish while choosing to engage or not with other children.

2.7.3.5 Conclusion

Children's painting and drawing are greatly valued in the Steiner Waldorf pre-school. They believe in the cognitive development and social and emotional skills gained through the exercise of drawing and painting and that self expression is encouraged through this process. The way colours are introduced to the child is unlike any other

of the different methodologies; the identification of the colours themselves in the Steiner Waldorf approach represents different ideas and has different meanings than the other methodologies. Steiner believed that action and repetition of painting and drawing allows the head, heart and hand to be involved in the learning process.

2.7.3.6 Summary

To recreate the Steiner Waldorf approach to art the following should be incorporated:

- Discussion through nature, seasons, poems and colour are encouraged (Oppenheimer, 2007).
- The tone of voice: no shouting but singing/talking to engage with the children, during art only interrupt when spoken to (Grunelius, 1996).
- Introduce only natural materials, mostly wooden, with muted classroom colours (Grunelius, 1996).
- When painting only use two water colours at a time and through example teach children how to mix and control the colours (Muller, 2004)
- When colouring with crayons encourage shading instead of focusing on outlining (Muller, 2004)
- Encourage the children to talk around their pictures with stories from them and engage in group discussion (Rawson & Richter, 2000)

2.8 The Montessori system

2.8.1 The methodology

Maria Montessori (1870-1952) became director of a school of children with learning disabilities at twenty eight. There, within two years, the children under her guidance, took a school exam and passed successfully. Montessori went back to university to study psychology and anthropology where she developed her teaching method from her previous findings and through further study of many children (Lillard, 1996).She believed 'the superior work of the schools' and of children "is ultimately creative and is helped by the imagination" states Buckenmeyer (1997, p.51). In her writings she

posited that "children have an inner need to learn to know themselves and their world" Montessori Jr (1997, p.29).

For children from birth to six years Dr. Montessori uses the term 'Absorbent Mind' and she believed that children of this age are particularly receptive, without conscious effort, to certain stimuli (Montessori, 2003) and from age three to six years although children still have an absorbent mind they are starting the development of a 'conscious mind' (Britton, 1992, p.12). The environment for children between three and six years she named 'Casa de Bambini, or House of Children' as it is unlike a traditional pre-school, states Stephenson (2007, p.96). The three main beliefs in a Montessori classroom are: prepared environment, prepared adult, freedom with responsibility (Lillard, 1996). Kanh (1995) writes that the freedom to move in a Montessori classroom and explore removes direct teaching. This leads to learning independently and lays the foundations for true understanding of abstract thinking later on in life. Up to six years of age there are no requirements academically as Dr.Montessori wished to expand children's intelligence, control over other mental functions, and their actions (Standing, 1998).

Everything in her class room had a purpose: furniture was scaled to child size, only one of each piece of equipment was supplied and all materials were within reaching distance thus creating a "prepared environment" (Montessori Jr, 1997, p.67). Each object had its own place to stay unless being used and so materials are introduced in an orderly way to the children. Montessori believed this would help the child's mind follow logical and orderly thought processes and thus assist the development of moral standards and respect for others. The prepared space should be a place of beauty, order and simplicity (Lillard, 1996). The teacher lets the child choose an activity, lets them set their own pace and so must follow the child's lead (Kahn, 1995). Montessori believed that if the children were working as if the teacher did not exist then the teacher had achieved her goal of developing their concentration (Montessori, 2003). Though when she describes dealing with a difficult child she acknowledges the interruption but with a sign of affection or an exclamation and when the child finally takes an interest in some other equipment does not even break their concentration with praise (Standing, 1998).

Lillard (1996) tells us the essential child development in the Montessori pre-school is personality and social behaviour through education of character - being polite, helpful and considerate and by indirect learning from other children. Within her method she uses natural physiological and psychical child development separating it into three parts: motor education which she believed the environment in her class would stimulate, and sensory and language education which would be provided for by her use of didactic materials (Montessori, 1976). Sensorial materials serve to abstract from concrete objects, all toys and materials should be of hand and brain unison so making mental connection from abstract idea to formulation (Lillard, 1996).

2.8.2 Teacher training and pre-school content

The teacher is sometimes called "guide" or "directress" because of their role in the classroom explains Standing (1998, p.297). The prepared teacher, through daily observation, assesses which are the appropriate needs of the child in relation to their development plan (Lillard, 1996). The main contribution to the raising and educating of children stated by Montessori educators is believed to be:

- Preparing the most natural and life-supporting environments for the child
- Observing the child living freely in this environment
- Continually adapting the environment in order that the child may fulfil his or her greatest potential, physically, mentally emotionally and spiritually (Standing, 1998)

2.8.2.1 Montessori teacher training

2.8.2.1.1 International Montessori teacher training

The AMI (Association Montessori International) shows us an example of the Montessori teacher training available:

- Level of Training: 0-3, 3-6, 6-12 years

- Course Format: Intensive 9-months full-time, course of on site training with teacher trainers. All-inclusive pre-service training, including observation and student teaching.

- Certification: AMI diploma. Many colleges give credit for this course.

- The course content for Montessori Teacher Training Diploma in the child age group 3-6 years is:

  - Section 1 Child Psychology (2 parts)

    - From birth to adulthood a study of human development focusing on the psychology and physical stages of children 3-6 years

  - Section 2 Montessori Philosophy (2 parts)

    - Studying the concepts 'Absorbent Mind', 'Sensitive Periods' and 'Human tendencies'
    - Freedom of environment for the child
    - Independence encouraged in the child
    - Concentration
    - Reality and Nature; the child needs real objects
    - Beauty in the environment
    - Social awareness
    - Respect
    - The Absorbent Mind – Sensitive periods
    - Co-operation with parents

  - Section 3 Montessori Methodology (3 parts)

    - The role of the Montessori Directress
    - Montessori Materials - Practical life
    - Sensorial Material

- Language
- Mathematics
- Cultural Subjects

- Section 4 (1 part)

  - Organization and Administration of a Montessori School

2.8.2.2.2 Irish Montessori teacher training

St Nicholas Montessori College Dublin offers another a further example of the Montessori teacher training available in Ireland:

Bachelor of Arts in Montessori Education
This 3 year, full time course educates students to teach children aged between birth and 12 years. The course consists of six modules: Montessori Theory, Montessori Methodology, Montessori Internship, Special Education, Psychology, Cultural Studies and Irish. Each module is taken in years 1, 2 & 3.

Course Content

- Montessori Theory: theoretical basis for Montessori's philosophy and approach to education

- Montessori Methodology: teaching methodology encompassing all curricular subjects relevant to the primary school curriculum (1999).

- Montessori Internship: the application of Montessori Theory and Methodology within a classroom setting/environment supported by a qualified teacher

- Psychology: the psychology of child development and its application in the classroom

- Special Education: an essential approach to inclusive practice in the classroom

- Cultural Studies/Irish: an elective module, in which the student chooses either Cultural Studies (English Literature and Art Appreciation) or Irish (includes one week in the Gaeltacht per year of study)

(Saint Nicholas Montessori College Dublin, 2010)

2.8.2.3 Two rules in the 'House of Children'

There is no curriculum in the Montessori class room or House of Children aged between 3-6 years but there are two main rules states Stephenson (2007, p.49):

- "We don't interrupt someone who is concentrating"
- "One can work with any material whose purpose one understands – having learned it from the teacher or another child"

The role of the adult is to observe and work to meet the emotional, mental, and physical needs of the children.

In the traditional Montessori training it would be a full year of graduate work in each of these three age levels, and stages of development, of children: birth to three years, three years, to six years six years to twelve years.

2.8.2.4 Key Elements in the Montessori Method

- Self-education
- Individual instruction
- Didactic materials
- Prepared environment
- Trained directress

2.8.3 Montessori art theory

2.8.3.1 Environment

The environment should be simple with plants and muted colours arranged and devised to inspire the child to activity (Kanh, 1995). Art materials should be appealingly laid out with a prepared easel therefore children will know where to find them and be free to choose an activity (Salmon, 1997). There should sometimes be a table provided to exhibit art pieces thus engaging them with stories and their imagination in order that focused activity should be productive and enriched (Lillard, 1996). The space should not be cluttered so equipment and materials are organised and presented to the children to expand their concentration (Buckenmeyer, 1997). Mario Montessori Jr. (1997) recommends that the room should support a child's desire for self-expression through the provision of colouring materials and blank paper, adding that art materials of many kinds serve very well in this connection. The environment should offer space on the floor with rugs to create or draw so the children can work on their art with no time limit imposed (Montessori, 1976). Further equipment should be made available for children to learn colour tone through more didactic materials (Montessori, 1976). The provision of an easel gives the child space to create freely.

2.8.3.2 Learning outcomes

The arts are not treated as a specialty subject; instead art and music activities should be viewed as forms of self-expression explains Kahn (1995). The use of colour among other elements is provided in a creative task while learning about colours and their various tones is supported through didactic materials for sensory development and exploration such as tracing (Montessori, 1972). Drawing exercises should be taught purposefully to train the hand to write, focusing on geometric shapes and using ridge restrictions; free drawing has no place in the Montessori classroom (Montessori, 1976). Children should draw through "indirect methods" such as tracing the "geometrical shapes" and shading corresponding shapes so learning how to manage a pen for writing and developing motor education (Montessori, 2005, p.99). There should be a folder with famous paintings and information of the artists for the child to

pick up and study so developing observation, definitions and memory. The children should be encouraged to discuss the pictures through its history and its artist and their own personal preference to the works.

2.8.3.3 Facilitation

The adult's role as a facilitator is to help children's natural yearning to learn and teach themselves (Lillard & Jessen, 2003). The adult should engage the children in the artist folder: taking a picture at a time, making sure all can see it, providing information about the artist and then encouraging the children to discuss their preference (Lillard, 1996). This should also involve a group discussion and the children talking to each other about their likes and dislikes so developing social skills and the ability to engage in discussion. The adult should want to inspire the children to draw and paint by showing these famous paintings (Lillard, 1996). The adult should teach colours and their various shades through a system of didactic materials and coloured tablets. There should be nine colours comprised of seven different shades of intensity (Montessori, 1976). Learning these colours helps refine definitions and the child's sense of judgement and observation (Montessori, 2005). The adult should have taught each child fully the use of a piece of equipment before they can use it by themselves. They should guide through few words and keep the active enthusiasm of learning as their real goal in guidance (Montessori, 2005). The adult should provide the child with uninterrupted space to create whatever inspires them. The children should be taught not to copy or imitate adult work or produce the same pictures as other children. The teacher should be interested in continual learning themselves with personal reflection and be a model to the children over their three year period (Lillard, 1996).

2.8.3.4 The child

The child will benefit from using the best natural materials such as brushes crayons, paper and pencils. He/she may be absorbed in an activity thus "developing concentration and should not be interrupted" states Claremont (1984, p.280). There should be freedom to self initiate and self direct an activity of their choice, through the prepared environment choosing which art materials they would like to use and

being free to create what they wish (Kanh, 1995). The child should be respectful of its peers and the environment by returning all equipment back to the shelf ready for another child to use (Kanh, 1995).

2.8.3.5 Conclusion

Art itself is not taught in a traditional sense but the 'directress' will want to inspire the children to draw and paint by showing and displaying pictures of great masterpieces. This will be developed further by discussing the artist and their work so engaging the child who is interested in how things are created and made (Standing, 1998). In the indirect learning model the real world is seen as a wonderful creation, the children are exposed to it in many different ways and play is regarded as work; the imagination and fantasy of the child is seen to hold an important place in the creative process. Sometimes a table is laid out to exhibit art and objects giving the children exposure to these and to encourage stories about the artists who interest them (Lillard, 1996). With the art materials and other equipment so easily accessible the child will decide when they want to paint or draw, though each class only has one of each product and so the child will learn patience and respect of other work being created (Kanh, 1995).

2.8.3.6 Summary

To recreate the Montessori approach to art the following should be incorporated:

- Have only one of each art materials and keep it clean, complete, ready for use, and within reach of the children (Kanh, 1995).
- Let the child choose when and where they want to paint and offer floor space if they wish (Montessori, 1976).
- Do not interfere with or distract the child at all when they are focused on their work (Kanh, 1995).
- Teach how to use or operate all materials or equipment before starting (Kanh, 1995).
- Make sure all children learn that they must wait their turn to use some materials and when finished they must clean up and put away for the next child to use (Montessori, 1976).

- Keep the space clutter free and all materials organised for the prepared environment (Kanh, 1995)
- Engage the children through the 'artist' folder or a table of art pieces to encourage imagination, memory and social development through discussion (Lillard, 1996).

2.9 The HighScope System

2.9.1 The Methodology

The HighScope Pre-school curriculum was instituted by David P. Weikart in 1962 when he was a director of special services for the Ypsilanti Public Schools, USA. Weikart was aided by an ad hoc committee of three high school principles and special services personnel who formed a committee to facilitate the development of the "persistent failure of high school students from Ypsilanti's poorest neighbourhoods" (Hohmann & Weikart, 2002, p.3). Out of this was born the Perry Pre-School Project which became the foundation for the HighScope approach. They believed that children aged three to five years could be helped through their educational life by a more 'intellectual development' approach than the then current social and emotional growth provided in the pre-school settings (Hohmann & Weikart, 2002; Hohmann, 2008). The HighScope educational approach has its foundations in an active learning model that places its emphasis on participants' intellectual and social progress. This approach lets children "interact with materials, people, ideas, and events to construct their knowledge and understanding of their world" (Epstein & Trimis, 2002, p.17). They started to work towards active listening and underpinned the curriculum development with three basic criteria as detailed by Hohmann and Weikart (2002, p.4) below:

- A coherent theory about teaching and learning must guide the curriculum development process;

- Curriculum theory and practice must support each child's capacity to develop individual talents and abilities through ongoing opportunities for active learning;

- The teachers, researchers, and administrators must work as partners in all aspects of curriculum development states

The 'plan-do-review' process is at the core of the HighScope curriculum and has become the most important part of the daily routine (Vogel, 2001; Epstein & Trimis, 2002; Hohmann & Weikart, 2002). This involves children reflecting on what they have done, making their own decisions and developing an "active learning approach" with their own interests taken into consideration (Vogel, 2001; Epstein & Trimis, 2002, p.17). This system works because as active listeners within an encouraging classroom ethos, children develop a "sense of initiative and pro-social dispositions" that positively affect their subsequent learning and life decisions explains Hohmann and Weikart (2002, p.9). The staff at the HighScope Educational Research Foundation, which was established by Weikart in 1970, has continued to expand and develop this active learning approach over the decades. Their ongoing research and findings show that children given a quality pre-school education, focusing on educational development as well as the other development areas, will enjoy an immediate effect and lifelong beneficial results. Steinhart (2001, p.253) supports this stating that this "pre-school program helped children get ready for school, having an immediate effect on their intellectual performance (64% vs. 27% with IQ of 90 or more at school entry)".

HighScope theory prescribes that art will help develop social and emotional skills, cognitive, language, physical and perceptual skills; it also supports art education for its own merit (Vogel, 2001; Epstein & Trimis, 2002; Hohmann & Weikart, 2002). Epstein and Trimis (2002) state that if the pleasure of enjoying art is introduced to young children then this will continue for the rest of their lives so deepening their understanding of their world, environment and encouraging them to explore. In England, HighScope have joined the Arts Education Partnership (1998) agreeing that art can bring much personal satisfaction and should have a central place in the early

years' development programme. Drawing is just one of the ways that the teacher should develop and grow skills by offering "children all kinds of writing materials" such as "paper in various sizes and colours, paints, brushes, marking pens, crayons, and coloured pencils" states Hohmann and Weikart (2002, p.361). HighScope supports the key experiences of language and literacy through writing in various ways, thus giving opportunity, experience and confidence to pre-school children (Hohmann & Weikart, 2002; Hohmann, 2008). The adult's facilitation of sharing control is of key importance.

2.9.2 Teacher training and pre-school content

The HighScope model is constantly being updated and reviewed based on current research. HighScope teaching practices for adults through active sharing with the children is supported by the curriculum principles. HighScope has identified three areas which the teacher can use to support their class programmes and planning process:

- Adult-child interaction – the sharing of control with the children is one of the most important HighScope strategies thus creating an even-handed partnership environment with the children.

- Classroom lay out and materials – the classroom is divided into areas of interest for the children for example a reading area, art area and house area. This is believed to help the child understand that the world and their world is organised. Outside is also seen a as learning environment.

- Daily routines – this steady framework is in place to help engage the child in small and large group programmes and so develop their social and individual skills.

(HighScope Educational Research Foundation 2010a)

There are five main curriculum content areas: approaches to learning; language, literacy, and communication; social and emotional development; physical development, health, and well-being; and arts and sciences. Art is further broken down into three components: art, pretend play, and music. The content areas are assessed under the 58 key developmental indicators or key experiences which are aimed at facilitating by providing observable behaviours and mental abilities for the teacher to base their choices of activities on.

2.9.3 Training and certification.

HighScope training is in a two step process:

2.9.3.1 Preschool Curriculum Course (PCC)

The HighScope Foundation offers a total of twenty days of comprehensive course work which is designed to aid teachers in full and successful implementation of the HighScope Curriculum for preschool. Course content includes the research that validates the HighScope Curriculum; also offered are a range of practical experiences that strengthen teachers' understanding of each component of the model: active learning, adult/child interaction, the daily routine, key developmental indicators (formerly key experiences), child observation and assessment, and the learning environment. A common theme in all these experiences is that active, participatory learning is the most effective approach in helping children become independent thinkers and problem-solvers and in preparing them for kindergarten."
(HighScope Educational Research Foundation 2010b)

2.9.3.2 Teacher certification

Those who have qualified at the above level are invited to become a teacher by completing the teacher training as follows:

"Teachers who are devoted to providing high-quality experiences while implementing the HighScope Curriculum are encouraged to apply for Teacher Certification. The certification process, conducted by HighScope, recognizes teachers whose practice reflects a high degree of knowledge about child development and have skill in

implementing educational approach and curriculum. Achieving HighScope Teacher Certification indicates that the students receive some of the very best instruction available in early childhood education.

To be certified, teachers must take these steps:

- Complete the Pre-school Curriculum Course (PCC) or equivalent training or experience.

- Demonstrate high-quality programme implementation — Teachers must be observed and rated by a certified trainer using the Pre-school Program Quality Assessment (PQA). To be certified, a teacher must achieve a rating of 4 or above (out of 5) on all the certification scales and have an average rating of at least 4.5 on the PQA.

- Demonstrate knowledge and use of the Child Observation Record (COR) — Teachers must use the COR to observe and rate two children for a period of three months. They must submit a full set of anecdotal notes and a completed COR assessment for each child.

- Present Daily Plans — Teachers must complete the Daily Team Planning Form and Team Planning Narrative explaining how the teaching team uses the form to plan based on children's interests and development and the HighScope key developmental indicators.

- Provide a Professional Development Narrative — Teachers must explain how they reached their current level of expertise, including participation in the HighScope PCC or equivalent training.

- Provide a current government license or certificate.

- Complete an application form; submit it with PQA documentation, other supporting documents, and a $65 processing to fee HighScope.

HighScope Teacher certification lasts for 3 years. The standards and forms for recertification are the same as for initial certification"

(HighScope Educational Research Foundation 2010c)

2.9.4 HighScope art theory

2.9.4.1 Environment

> "The space and materials in a HighScope setting are carefully arranged to promote active learning. The centre is divided into interest areas organized around specific kinds of play; for example, building block area, house area, small toy area, book area, sand-and-water area, and art area"
>
> (HighScope Educational Research Foundation 2010d)

The environment should support as many art materials for drawing and painting as possible with the provision of space for discovery and investigation (Hohmann & Weikart, 2002). There should be a prepared art space and a readily accessible range of materials with tables and chairs, offering further space for their creative ideas and encouraging them to make their own decisions (Epstein, 2009). The environment should also offer some outdoor drawing and painting, developing more exploration and making connections with nature and learning. The children use tables to paint on rather than easels thus offering "more advanced hand positions during painting tasks" (Seefeldt, 1987, p.202). The environment should offer sensory investigation to explore objects by sight, sound, touch, taste and smell and also, states Epstein and Trimis (2002, p.89), be rich with wall displays engaging children to make connections in their learning and development.

2.9.4.2 Learning outcomes

Art experiences should develop the child's use of perception, memory and concept formation by involving the perception of similarities and differences (Epstein &

Trimis, 2002; Epstein, 2009). This involves the children learning how to mix colours thus giving them the ability to make the colours they want for their pictures and so helping the child understand the physical and visual properties of materials. The art space should offer opportunities for experimentation with appropriate materials over sufficient time (Smith, 1982). The children are allowed to create and explore without an "adult designed product" so encouraging reflection on their visual representation, and the goal is to provide "creativity, not conformity" and the establishment of "process oriented art" explains Epstein and Trimis (2002, p.78). Through the provision of many examples of artists' pictures the children should be encouraged to engage in conversation about comparisons which enrich further creation (Epstein & Trimis, 2002). During free art time they are provided with the space for art, with no adult influence, to support and develop their own creative ideas.

2.9.4.3 Facilitation

The HighScope curriculum is built around teacher and child led activities and this combined approach is taken in the facilitation of art (Vogel, 2001). The adult should foresee a range of approaches for the children's drawing and painting and allow for the development of their marks and scribbles, shapes, simple figures and more distinctive figures aiding cognitive development (Hohmann & Weikart, 2002; Hohmann, 2008). The adult should observe by sitting near the child and actively listen to them while they are painting as they may talk to themselves while absorbed in this process so developing their concentration (Vogel, 2001). This should give the teacher a better understanding of what the painting is meant to be, and interaction with the children can extend these artistic explorations (Epstein & Trimis, 2002). The adult should never criticise what they are doing as this can take away from their creative exploration and while the children are engaged in free art time the adult should only speak when spoken to (Hohmann, 2008). The teachers must give the children time to finish and complete their pictures should this mean that they come back to the same picture the following day, thus developing their task persistence (Hohmann & Weikart, 2002). The adult should create an environment rich in materials and adult guidance so the children will be actively engaged by their decisions on how and what they wish to learn (Epstein & Trimis, 2002). The adult should value their art through group and personal wall displays (Epstein, 2009).

2.9.4.4 The child

Drawing and painting activities include the children's input therefore shared discussion about the children's pictures is useful in recall time (Epstein & Trimis, 2002). The child should be valued through their art therefore the work is displayed sensitively and sometimes it can be brought home to share with the family (Vogel, 2001). The child is offered varied art experiences and through this develops many aspects of social and emotional skills, creative thinking, and the expression of their own creative ideas through both free play art and group projects.

2.9.4.5 Conclusion

HighScope places more emphasis on intellectual development than some other pre-school settings through social, emotional, cognitive, language, physical and perceptual skills (Hohmann & Weikart, 2002). Self expression through art is seen as the child trying to construct the world around them in order to understand the knowledge they have gained and each art work is valued (Hohmann & Weikart, 2002; Hohmann, 2008). HighScope views drawing as literacy development, appreciating that drawing is a non verbal communication skill and through this the pre-school child is expressing their ideas (Epstein, 2009). Recall time, which lasts about ten fifteen minutes and encourages the children's to reflect on their actions thus exercising their capacity to talk about mental images hence making their experiences public (Vogel, 2001)

2.9.4.6 Summary

To recreate the HighScope approach to art the following should be incorporated:

- The adult should step back and let the child work through the process mostly themselves (Epstein & Trimis, 2002)

- Quietly observe the child and sit near to them while they are painting as they may talk out loud to themselves and so an understanding of the picture is gained (Epstein & Trimis, 2002)

- Value the child's art work and send some home to be enjoyed by the family also (Epstein & Trimis, 2002)

- Share planning time with the children to discuss the next class (Vogel, 2001)

- Allow the child as much time as needed to finish their drawing and let them come back to it even the next day (Epstein & Trimis, 2002).

- Encourage them to investigate through art materials using their senses to develop their own creative ideas (Hohmann & Weikart, 2002).

2.10 Conclusion of art theory in the pre-school systems

2.10.1 Mainstream

The aim of their environment is to encourage children to use many different materials to support learning through exploration. Creativity in drawing and painting is encouraged to promote the children's self expression and development of their own ideas. The adult is encouraged to support this by showing they value the children's work through wall display and help them to value their peers work also. The learning outcomes are to develop the children's concentration skills, technical skills and cognitive development. Learning through art should start with something the children already know using a theme for development thus making connections in learning. Technical skill learning is a means to an end as children should be competent users of scissors, crayons and paints before they go to school.

2.10.2 Steiner Waldorf

This aim of their environment is to support children painting unconsciously without correction and to encourage children to discuss or 'read' their own drawings with other children. The aim of painting and drawing is to help children express themselves physically using their fingers and so enabling them to work through their emotions. The kindergarten principle is that all learning should support emotional, cognitive and social development as of equal importance and the adult should lead through imitation. Drawing and shading should be encouraged and when painting use only two colours thus the learning outcomes are to develop a child's responses to discussion and encourage them to learn and play together. Other learning outcomes are to help reinforce memory through stories of nature and colours before drawing; to paint with purposeful steps; to develop the skill of socialisation in different situations.

2.10.3 Montessori

The aim of the environment is to offer a prepared art space giving freedom and respect for the child to self initiate and self direct through an activity with an easel and paints readily being available in the classroom. Development in Montessori is focused on personality, social behaviour and indirect learning, supported through the preparation and their observation of the adult. The learning outcomes are: motor education through the prepared environment, training the hand to write through tracing, learning to refine colours; definitions, judgements and observation. The provision of a personal folder for their drawings is developing reflection on previous work and making connections in learning, so aiding cognitive and perceptual development. The artist folder is used to develop awareness of how things are constructed, develop memory and to engage in discussion.

2.10.4 HighScope

The aim of this environment is to provide an adult-child interaction sharing control through discussion of art time in the 'plan-do' time. The environment should be rich with materials and support the exploration through the senses of sight, sound, touch, taste and smell. Learning outcomes are to develop social and emotional skills,

cognitive, language, physical and perceptual skills. Using art the adult should support the development of perception, memory and concept formation which develop creativity through observation. The child is encouraged to explore without an adult designed product. Art is offered and valued through various different approaches: free art time, group art, art with music, a display of personal pictures and taking some work home.

2.11 Literature review conclusion

The object of the secondary research was to develop the necessary understanding and criteria creating an observation tool to assess and measure developmental areas within a pre-school art experience, from the primary research phase, also to build on this understanding by a review of the theory of each pre-school art method in order to properly inform the analysis of each pre-schools theory to practice.

The research began with an overview of prehistoric art and the different styles and methods it employed in order to gain an informed appreciation of its origins and elemental formation before looking at any similarity shared with children's art. The review then looked at the development and process of children's art through previous investigations. By comparing the two, insights were gained into why children inherently produce art, how they use it to communicate and what it means to them. It also provided a foundation on which to base further discussion of art and development. Within the context of pre-school children's art the analytical journey undertaken has illuminated the prominent beliefs held by art teachers, psychologists, art critics and creative developmental and educational theorists. This brings together this research's collaboration of their many views and theories in an attempt to fully understand creative development and its role in learning. In so doing it was noted that taking a view on how child creativity is nurtured is pivotal in their later development. Different responses to the question of what a child is doing when being creative and how we should respond to this in order to foster their development, involve decisions which affect every area of the child's future. There are many positions held between these points of view which by consequence underpin different pre-school practices and curricula. Bearing this in mind the review went on to ask what constitutes a good

creative environment, a good facilitator and good pre-school art experience and what influence or impact these factors have on children during an art experience, with a view to creative development and learning.

Art in the early years should encourage the act of perceptual discernment and engagement in active perception, the development of aesthetic awareness and sensitivity to the natural and constructed environment; encourage cognitive development by developing an understanding of the world, constructing meaning, and engaging in symbolic activity. It can be understood as the communication of visual language, exercise of intuitive thinking and the attempt to perpetuate artistic knowledge and cultural practices. It should cultivate sensory awareness, through education of the senses. Its overall facilitation should underpin language, social, personal, physical, imaginative and creative development (Eglinton, 2003). It has been demonstrated that children use drawing and painting to make sense of their world by working through thoughts, feelings and experiences thus visually communicating them to us; therefore art can positively add to children's creative development while advancing them in social and emotional, cognitive, perceptual and technical areas. However, it was also noted that regardless of the theory, the extent of these development and learning outcomes will be directly impacted by the actual objective of an art exercise, how the environment supports this process and how the child is facilitated through it.

As mentioned, the research then proceeded to review the theory of each pre-school art method. The conclusion was a summary of the pre-schools theory of art in the classroom and how it should be presented. This overall conclusion of the pre-school art content summarised the theory of each systems aims and objectives in using art with children, specifically highlighting their projected learning outcomes, materials they use, their environmental aim and how this is supported. The collection of theories and key ideas from the literature review was also concluded, highlighting the way a pre-school could best provide the most supportive creative environment, the art facilitation, the child in the art process and the learning and developing through art. This will be used in the analysis of the findings to support the discussion of themes. A further conclusion followed showing how a complete child art experience should

encompass the listed criteria of the areas to promote the child's progress through creative development and supporting skills.

Chapter 3.

Methodology Chapter

3.1 Introduction

The research process began by immersion in the secondary material. By reviewing the literature pertaining to child development, creativity and pre-school practices this formed a base knowledge that would be later used in the presentation of findings and the analysis. A review international and national government policies was used to provide context for a further study of the history, theory, curriculum and training requirements of each pre-school thus clarify the factors influencing their provision of childcare. This was later used to examine issues regarding the relationship of theory to practice in the analysis.

With regard to the primary research the literary review provided criteria for the areas of assessment in art (Eglinton, 2005) which became the foundation of the observation tool used in the first phase of the primary research. This consisted of the observation of each pre-school system art time which ran over a twenty five week period. Participant and short term observation methods were employed. Two of each of the pre-school systems where visited, with the exception of HighScope as previously explained. Each childcare centre was observed four times and each observation session lasting approximately two hours. The objective was to record the practice of the art environment, the adult's role as art facilitator and the child in the art experience. Once all the art time observation sessions were complete the interview stage began. Appointments were made and each childcare centre was visited again thereby interviewing all the staff who had been observed. A total of twenty three staff was interviewed. The interviews were then used to inform the construction of the questionnaires. The questionnaires were posted to the staff members interviewed with

the exception of Montessori. Due to there being only two St Nicholas Montessori College accredited teachers in Co. Sligo the college was contacted and they provided a list of all accredited Montessori teachers nationally and questionnaires were then sent out accordingly. A total of twenty six staff responded to the questionnaires. Three community artists who have experience in running and facilitating art workshops with pre-school aged children were also interviewed in order to observe their skills in practice and thus gain more knowledge and skills to run and facilitate the research workshops. It was also seen as important to understand the relationship between facilitator and child from outside the confines of the pre-schools settings.

The second phase of the primary research was the art workshop action research. This phase introduced the social play continuum to work in parallel with the original observation tool. This second phase ran for twenty four weeks and was rolled out in the physical room of a childcare centre. Twenty children from this pre-school class were used for these observational purposes. The construction of the art workshops were informed by the observation notes from the first phase and were further built on by the data collected through the interviews and the questionnaires. The content of each art workshop was based on the pre-school practice of art time which focused not only on creating their objective of the art exercise but also their practical physical learning environment and facilitation methods observed. The art workshops in each systems method ran as follows:

- Steiner Waldorf method - 1 hour per week for six months – a total of twenty four hours over a period of twenty four weeks

- Montessori Method -1 hour per week for six months – a total of twenty four hours over a period of twenty four weeks

- HighScope method -1 hour per week for six months – a total of twenty four hours over a period of twenty four weeks

- Mainstream method -1 hour per week for six months – a total of twenty four hours over a period of twenty four weeks

A total of three methods were employed resulting in an overall mixed method approach. The qualitative data was collected through observation, participatory observation and semi structured interviews. The quantitative data was collected through further categories within the observation tool and the questionnaires. Documentary evidence was explored through a review of the literature in the field. All these methods combined provided a mixed method approach hence the provision of triangulation of the findings for analysis.

3.1.1 Mixed method

The fundamental principle of mixed method research is to understand the strengths and weaknesses of qualitative and quantitative research (Turner, 2003). The mixed method is a creative and expansive form of research which should not constrain or restrict the answering of the research questions, thus expanding the researcher's overall understanding (Bloor & Wood, 2006). From latter, the employment of the mixed methods was considered the best way to analyse this research data (Johnson & Onwuegbuzie, 2004). It should offer the best compromise between qualitative and quantitative research to produce better findings and free the research from the constraints of one approach. Merton and Kendall (1946) inform us that social scientists have come to discard the forced choice between qualitative and quantitative data and are focused on the combination of both to make the most valuable qualities of each. The researcher must have gained an understanding of the negative and positive uses of qualitative and quantitative research to best produce the appropriate mixed method (Bloor & Wood, 2006).Within mixed method typology there are two designs:

- Mixed Method – This is the inclusion of a quantitative phase and a qualitative phase in the research.

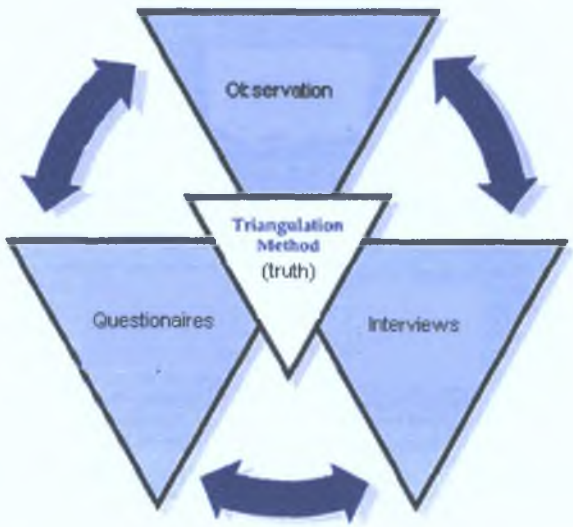
- Mixed Model – This is the mixing of quantitative and qualitative stages across or within the overall research.

Similarly this approach has been described as an additive multiple method, using the mix of methods on different data (often sequentially) or interactive multiple method, using the different methods on the same data (Bloor & Wood, 2006). They further state that the commitment to the use of multiple methods (both additive and interactive) is the "hallmark of a rigorous research design" and so reducing the problems connected with single methods Bloor and Wood (2006, p.117).

3.1.2 Triangulation

Figure 3. Triangulation diagram.

It was Denzin (1978) who first explained how to triangulate. He defined the method as the mixture of methodologies in the examination of the same phenomenon. He categorised four different types of triangulation. Only methodological triangulation was used for the purposes of this research, since the study uses quantitative and qualitative methods to elucidate complementary aspects of the same phenomenon.



Methodological triangulation is the combination of data from a collection of multiple sources. Within the confines of this research, triangulation is not used as a test for validity but to ensure that an account is vigorous, complete and well-developed. Aubrey et al. (2000) hold the view that the different methods themselves will offer different perspectives which is the provision of the triangulation. The triangulation of the recording materials used in the observation will help record many of the aspects that might be missed through just one method offering a multi observational perspective (Richardson, 2003). Clough and Nutbrown (2007) argue that the task of the methodology is the triangular connection between the researcher's questions, the research method design and data generated.

3.1.3 Key issues in this research

The aims and objectives of the research were:

- To analyse the Methodologies of Pre-School Art Education in Montessori, Steiner Waldorf, HighScope and Main stream Pre-School.

- To look at the development of these theories and form a deeper understanding of why they are used.

- Through this understanding, to observe in practice, record and analyse how this directly affects the various environments and the facilitation of children's creative development through art.

- To evaluate and compare how each methodology approaches the use of art as a medium for child development and education

- To recommend the optimum provision of environment and facilitation with which to encourage creative development through art under the headings :

  - Environment
  - Facilitation
  - Adult observation
  - The child's experiences

3.1.4 Methodological perspectives

This chapter will describe the philosophy and process that underpins the research. It will endeavour to justify the methods employed in the formulation and construction of the interviews, questionnaires, observation, facilitation, the art workshops and the observation tool. Broadly speaking, the objective of the work was to employ evidence and argument to create and support human knowledge by conducting social research that engaged with the subject by exploration, description, explanation, prediction, by

understanding or by changing or evaluating some aspect of our world (Blaikie, 1993; Graue, 2004). Fundamental to the research methods employed was that they offered the best chance to obtain useful answers to the research questions (Johnson & Onwuegbuzie, 2004). The goal was to illuminate different experiences and perspectives while trying to preserve the diverse richness of their environments which cannot be contained in a narrowly fixed approach (Graue & Walsh, 1998). This research does not set out to test a hypothesis or theory but is exploratory and looks for potential relationships between behaviours, events and the relationship of these variables. In attempting this, the research took human experience and viewed it as an object to be studied (Clough & Nutbrown, 2007). Oakeshott (1993) describes this as an 'arrest of experience' by means of which, in questioning assumptions from everyday life, the researcher steps aside from everyday experience and studies it as an object. The research used an exploration of different theoretical perspectives to develop criteria that was later used to create an appropriate framework for the findings and analysis. Radical enquiry was the central frame of the study at this stage. Clough and Nutbrown (2007) have defined radical enquiry into: radical looking, listening, reading and questioning.

3.2 Introduction to chosen research

The research followed the Anti-Positivism Paradigm, the philosophical belief that an individual's view on social reality is multi layered and understood through the accentuation of perceptions and explanation of phenomena. It employed Anti-positivism's Ethnomethodological school of thought and reported in the Ethnographic style. This approach attaches importance to a range of investigative techniques. Participant observation, personal interviews, and personal constructs were used to best answer the research questions (Dash, 1993). These were then put through qualitative analysis. The method of participant observation was used within the observation of pre-school art time and the facilitation of art during the art workshop research phase. A key ingredient of this method is the focus on people's practical actions in situational contexts and the study of these methods for making sense of their world (Bloor & Wood, 2006). This approach to research is well "established within the ethnographic tradition" (Audrey et al. 2000, p.116). The method offers the

opportunity to analyse an array of perspectives: both the total and external views of child, facilitator and observer. This approach was combined with Short term observation using the method of key focus points, since the art activities were of such short duration and the focus of the research could be broken down into clearly defined categories.

During the field observation the Ethnography method was employed to select a series of informants. This allowed the evaluation of the interviewers by immersion within the preschool settings, both in and outside the classroom, to gain the highest quality insight and knowledge of each teacher's personal view and understanding of art and how they understood their methodology. The Anti- Positivism Paradigm is a qualitative philosophy (Dash, 1993), however, to best answer the research questions the Mixed Method of data collection was chosen. This approach offered the use of Quantitative stages within a Qualitative paradigm. The use of the Interview Guide Approach was implemented to construct qualitative interviews; this allowed the childcare workers to be more conversational, so building more comprehensible data (Tuckman, 1972). This interview information was further used to construct the quantitative Questionnaires which comprised closed ended questions. Robson's (1998) five point rules were used to minimise any negative impressions on the informants. The validation of the findings was aided by the Triangulation of all these different techniques (Richardson, 2003). By finding and utilising correlations between the arrays of research data collected, triangulation served to deepen and also extend the analysis (Bloor & Wood, 2006). Further action research consisted of the facilitation of a 6 week Art Workshop Programme for each of the methodologies and analysis through the Art Workshop Observation Tool.

3.2.1 Study of research perspectives and methods

In selecting a paradigm and framework within the social sciences, it was necessary to find a concept that would give the freedom to study the meanings, values and symbols within a group of people or a culture. The Positivist Paradigm failed to recognise our unique ability to interpret our experiences and represent them to ourselves (Cohen, Maniom & Morrison, 2007). Too restrictive, its main objectives are calculation,

control and description, thus presenting a reductionist view of the goal of human understanding (Greige & Taylor, 2004).

The Positivists favour the mental and physical regularities of the human phenomenon. They record and focus on the unchanging characteristics of a person which are recurring and predictable (Cohen, Maniom & Morrison, 2007). By their use of empirical methods the aspects of creativity and imagination elude their analysis. In stressing objectivity, positivism draws a line between observer and actor. This ignores the fact that all human research has subjectivity in its essence (Ellis & Flaherty, 1992). These reservations meant embracing the Anti-Positivism Paradigm for the purposes of this research .The Anti-positivists believed that an individual's views on social reality are multi layered. This paradigm extols the creation of each subject's experiences and concepts while allowing multiple subjects to hold many different interpretations for one phenomenon. A criticism of anti-positivism is that the subjectivity of a researcher could bias the results and findings. The research understood this as a possible perceived limitation; however research within social science is a subjective rather than objective undertaking in that it deals with the direct experience of people in specific contexts (Cohen, Maniom & Morrison, 2007). People do not live in isolation and they need to be understood in the perspective of their cultural and shared life, thus scientific investigation methods cannot be seen as value-free because human values will always infringe on investigation (Burrell and Morgan 1979). Further to this, Cohen, Maniom & Morrison, (2007) argue that knowledge can never be neutral and Weber (1948) argues that scientific objectivity and value-freedom is not possible within sociology. Nevertheless with these reservations in mind the research accepted their limitations and managed these through the ethical issues and limitations. Having dealt with these difficulties, the research proceeded in line with the anti-positivist paradigm by using the search for significant relationships to detect their 'consequences for action' (Cohen, Maniom & Morrison, 2007, p.9).

An Anti-Positivism Paradigm provides three philosophical schools of thought for research: Phenomenology is an in-depth qualitative description and interpretation of a phenomenon; Ethnomethodology is investigating people's methods about how they

logically understand and perceive their world (Bloor & Wood 2006); and symbolic-interactionism is the understanding of interactions between human beings and their interpretation of these (Dash, 1993). The common thread between them is a focus on the phenomena of events which happen in our everyday lives as approached through qualitative analysis (Cohen, Maniom & Morrison, 2007). In looking for a method to report on each research phase the phenomenographic method was considered. A phenomenographic analysis seeks an understanding through the analysis of description of experiences (Marton, 1981). Phenomenography allows personal experiences as data for analysis and the collection methods typically include closed interviews with a small purposive sample. The research is working towards the most comprehensive and achievable reflection of the interviewee's words as possible (Marton & Booth, 1997) which agrees with the purpose of this study. However, because this method's main focus is on closed interviews it was considered comparatively reductionist in its scope. Garfinkel (2002) explains that the ethnomethodologist's field of investigation is the study of the social practices of real people in real settings, and the methods by which adults and children produce and maintain a shared sense of social order. Thus the ethnomethodological school best embodied the ethos of this research.

> "It is directed at the mechanisms by which participants achieve and sustain interaction in a social encounter – the assumptions they make, the conventions they utilize, and the practices they adopt"
> (Cohen, Maniom & Morrison, 2007, p.24)

It was in seeking a more complete method that ethnography was considered. Bell (1993) tells us the ethnographer focuses on the use of descriptions from human social and collective phenomena, believing that these structural properties cannot be understood separately from each other. An ethnographic approach observes the participants and enables the researcher to "share the same experience as the subjects and so to understand better why they acted the way they did" (Bell, 1993, p.10). By using participant observation interviews and questionnaires for data collection, this method includes all the qualitative values this research needs to complete its objectives.

3.2.2 Documentary Evidence through Literature Review

Research design is the construction of the methods used for data gathering and the analysis (Mac Naughton, Rolfe & Siraj-Blatchford, 2005). As mentioned above, a thorough exploration of different theoretical perspectives was carried out in order to define the criteria that were later used to develop the framework for the findings and analysis. As part of this radical enquiry, both primary and secondary research was employed. The methods used within the Secondary research were to:

- Analyse literature, journals and articles on research into children's creative development.
- Review government policies, curriculum, qualifications and educational teachings through art in main stream pre-school to ascertain the mainstream system of pre-school art education.
- Review HighScope curriculum, principles and educational teachings through art to ascertain the HighScope system of pre-school art education.
- Review Montessori Services publications, to ascertain the Montessori system of pre-school art education.
- Review Steiner Waldorf Education publications examining the Steiner Waldorf views and teachings on education through art to pre-school children to ascertain the Steiner Waldorf system.
- Collate all information on the four different pre-schools and review art in the classroom under the headings of environment, facilitation and child in the art experience.

By analysing the secondary literature criteria in this way, criteria were developed and placed in a framework that informed the creation of the tool used in the observation.

3.3 Qualitative research

Qualitative research is often an investigative generic term for methods such as Participant Observation and Field work thus using subjective information for a wide understanding of the entire situation (Jacob, 1988). The qualitative approach focuses on the 'who and why' and involves in-depth understanding of decision-making. Pole and Lampard (2002) tell us that significance attributed by researchers to text is not the only role of the document but also their approach in how to interpret it. Qualitative research is used to obtain information on a particular subject in a social setting relating to the attitudes, values and altering behaviours, and through its analysis it should be, as described by Bowland (2008), a meticulous and comprehensive description. The characteristics in Qualitative Research are:

- Its purpose is to understand personal interpretations
- Holistic and Naturalistic for a complete picture in the natural environment
- The viewpoint is of the insider, their changing reality with changing perception
- A discovery of theories from subjective data of people and their perceptions
- Values should be accounted for and so results will have more depth and real understanding

(Key, 1997)

Qualitative analysis will allow for detailed distinctions to be made and covers a wide range of definitions where qualitative collection can be used: observational records, interview notes and personal notes (Bowland, 2008). The qualitative interview has a much larger concern from the interviewee's point of view and outlook and, with the interviewer asking open-ended questions, they can gain and use the interviewee's direct testament using quotation (Bryman, 2004). Punch (1998) also argues that

qualitative data may be described as empirical information about the world in the form of words, describing it thus:

> "..an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting"
> (Creswell, 1998, p.15).

The qualitative methods in this research are: interviews, observation and a majority of the analysis. Qualitative research is exploratory and may not produce data that could be displayed in a quantitative mathematical way but through its analysis can produce very detailed description and understanding (Bryman, 2004).

3.3.1 Child observation methods

Child observations are close examinations of children focusing on their language, behaviour and other aspects of their development (Harding and Meldon-Smith, 2008). Observation methods such as event sampling, language and tape sampling, and targeting of the child are all employed within child observation. Each has its own particular method of criticism whether it uses a pre-decided event or behaviour under observation with its immediate recording, the close examination of the child's speech, or observing a child at pre-arranged intervals in a pre-coded data collection (Harding and Meldon-Smith, 2008). It was considered that these methods would restrict the intention of this research to obtain a wide variety of perspectives within the art experience through their singular or non participant observational analysis. The original observational research questions, when formulating the specific objectives were: What will be observed? Which behaviours, events and characteristics will be observed? And which perspectives should be examined, whether it is the teacher, child or researcher or some combination of all three? The methods used will direct the research and define the answers to these questions (Clough and Nutbrown, 2007).

3.3.1.1 Observation methods employed

Participant observation has always played a forefront role in child art research and has confirmed its significance by contributing to an understanding of the context of every drawing episode (Coates, 2002). Its main objective is to get close to a group of people and gain 'intimate familiarity' through qualitative research. The subjective information gained describes the perspective, or natural setting, of the variables under reflection and the connections of the other variables in the situation (Key, 1997). Thus, through participation, the many interrelationships between the variables in the situation are elucidated which produces and provides a wider understanding and knowledge of the entire situation.

> "..participant observation makes no firm assumptions about what is important. This method encourages researchers to *immerse* themselves in the day-to-day activities of the people whom they are attempting to understand. In contrast to testing ideas (deductive), they may be developed from observations (inductive)"
> (May, 2001)

Participant observation originated from fieldwork carried out by social anthropologists and their intensive study and involvement of groups of people in their natural environment (Aubrey et al. 2000). This research method involves both a qualitative collection of data with a quantitative dimension, which seeks to organize the data through a social theory rather than a definite objective. The methods involved were as follows:

- Life-histories recorded
- Participation in the group
- Detailed records of characteristics taken for granted within the group
- Detaches from the group to review records in a neutral position

- An informal interview process
- Direct personal observation
- Self-analysis - monitor self and records for any personal discrimination or preconceived notion

(Aubrey et al. 2000)

Of these, only the first was not used within the research which interpreted this action by a record of the educational histories of the respondents and interviewees.
Cohen, Maniom & Morrison (2007) write that the educational researcher should not be interested in every particle of the situation but what is fundamentally significant to a group of people in their subjectively controlled world. They also state that the undertaking of the researcher is to describe the means in which an organized social world is created and supported through terms of collective meanings. These types of Participant Observation:

- Total Participation – This is the utmost level of participation when the researcher is already a natural participant
- Active Participation – The researcher will observe to learn the rules from others to then become actively occupied in the surroundings.
- Balanced Participation – The researcher will become involved in some of the activities while staying an observer in other activities.
- Passive Participation – The researcher will take the role as observer at the scene but does not participate.
- External Participation – The researcher will observe the scene and situations by television or recordings.

(Key, 1997)

The facilitator's role within the art workshops will necessitate total immersion with the children in their art process and so external participation considerations do not arise. This will include playing an active part in their conversations while they are drawing and painting and also acting as a focus for their direction and guidance through art process. In Woods' (1979, p.263) view the research style is termed "participant observation" and there is, indeed, a great deal of observation done,
"many studies based on it rely equally, if not more, on interviews, discussions, conversation: in short, some form of talk" The usual period of participant observation time is traditionally between six months and two years (Aubrey et al. 2000) but since the focus of the research questions looks solely at the facilitation of art, a short-term observation and the triangulation of research findings can be viewed as credible. The use of participant observation through short term observation design will be adequate and more appropriate. Short term observation provides the necessary tools for this research and analysis to create a more focused look at pre-school children's creativity in the art activity.

> "Types of short term observational research run the spectrum from crossing the boundary into quantitative research to very nearly ethnographic approach"
> (Constable et al. 2005, p.9)

The essence of short term observation is to examine individuals in their natural settings using qualitative observation methods which focus on more narrow categories (Constable et al. 2005). This type of observation functions well as a means of fleshing out quantitative research that would otherwise do little more than list numerical data. In particular, this method lent itself to the research during the observation of the preschool art time where a large amount of data was collected under categories. An additional merit of this method is that it lends itself easily to the triangulation of methods when analysing findings, thus producing more insight and accountability of the findings.

3.3.1.2 Design of observation

The managers of each pre-school contacted organised the time and day of each week for observation and took into consideration: the activity being recorded and relevant teachers present. The observation was run in the format below and each observation session lasted approximately two hours, during four visits, one day a week. The chosen observation methodology structure was:

- **Types of observation used**

Participant Observation – total and balanced
Short term observation
Qualitative/Quantitative – mixed model approach
Observation analysis recording tool

- **Sampling**

The Sligo County Childcare Committee was the sampling source for childcare workers' contacts. Purposive Sampling was employed which centred the researched sample on those who are relevant to help answer the research questions (Bryman, 2004).

- **Subjects/Informants**

  - Childcare workers
  - Two separate art sessions held in different centres from each pre-school system
  - Those who are actively involved in the art classes

- **Ethical issues**

  - Consent forms
  - Openness in all that was being researched

- **Construction of focus within observation**

How the methodology effects:

- Environment
- Facilitation
- Adult Observation
- Child experiences

How was this space provided?

- Shared group space
- Individual space

Was the art?

- Spontaneous art
- Product based art

How is the art valued?

- Is it rewarded
- Viewed as achievements
- Used for another objective

How did the adult facilitate?

- Empathy
- Direction
- Guidance
- Control

Notes were made on every possible aspect of the role of the adult: tone of voice, interaction during art experience, interaction with children and how the adult received

the drawing and painting of the child. The overall objective was to facilitate an art session, thus moving from balanced participation to total participation within the pre-school observation art time gained a wide array of perspectives.

3.3.2 A study of interview methods

The interview method is employed to gather significant information to either help answer the research questions or as evidence for how best to continue further with the research. An interview provides the researcher with access to a better understanding of what the respondent's knowledge, values, attitudes and beliefs are (Tuckman, 1972). The interviewer is vigorously trying to produce a context-bound description of the respondent's social world (Wood & Bloor, 2006).

> "Interviews enable participants – be they interviewers or interviewees – to discuss their interpretations of the world in which they live, and to express how they regard situations from their own point of view"
> (Cohen, Maniom & Morrison, 2007, p.267).

Spradley (1979) emphasizes that the researcher should state the purpose of the interview to the respondents through an explanation of why they are asking a particular line of questions and then take direction of the interview. The attributes of the ethnographer's interview are: trust in a joint pursuit through a common bond, with curiosity as the motivational force, and looking for what is in the interviewees' minds which is not affected by the interviewer. The ethnomethodogical approach is to seek content and not issues, thus through the narrative conveying meanings (Wood & Bloor, 2006). Pole & Lampard (2002) believe that the meanings a researcher places on a document demonstrate the researchers' agenda by their approach and how they interpret them. Within the construction of the interviews a researcher has many options:

Interview typologies:

- Single interviews, one person at a time, group interviews

- Using face to face approach, telephone interview, postal questionnaires
- Open ended questions, closed ended questions
- Structured, semi-structured, unstructured

(MacNaughton, Rolfe & Siraj-Blatchford, 2005)

The structured interview is recommended when the interviewer is aware of what they intend to analyse through questioning. In this way they can use the questions to aid their knowledge and achieve their objective. One example of this is the standardised open ended method interviewer using the Standardized open-ended will ensure that all interviewees will be asked the same questions with the same words and all in the same order. The structured interview is also fully scheduled and organized before it commences, and only if stated in advance some leeway is allowed, hence it is called a closed situation (Tuckman, 1972). Conversely, the unstructured interview is useful when the interviewer is conducting a more open ended analysis and will rely on the respondent to inform them on what they need to know (Lincoln & Guba, 1985). In the interview guide approach, the interviewer will outline and cover all topics and issues to be discussed in advance of the interview to the respondent and then choose the workings and the sequence of the questions in its course. (MacNaughton, Rolfe & Siraj-Blatchford, 2005). This is therefore an unstructured interview technique which again leaves the questions and sequence to the interviewer's discretion. The questions within the interview will need to be formulated from a viewpoint deciding on depth or specifics, respondent's knowledge of facts, attitudes or opinions (MacNaughton, Rolfe & Siraj-Blatchford, 2005).

3.3.2.1 Interview guide approach

As mentioned above, the interview guide approach, by employing indirect questioning, leads to more open responses within an interview. However, by varying the order of the questions it allows for different responses from the interviewees thus making comparability potentially difficult (Tuckman, 1972). Conversely, standardized

open-ended interview techniques can increase comparability when analysing the data by reducing the bias or effect of the interviewer. However, this in turn can restrict naturalness and flexibility during the interview and hence the relevance of both questions and answers (Patton, 1980). For the purposes of this research and in keeping with the anti-positivist paradigm, the interview guide approach was chosen. The difficulties of comparability did not arise as the information gathered through interviews was used for ethnographic purposes. Tuckman (1972) tells us that specific or direct questions could cause the respondent to be defensive and not as honest, while less direct questions may lead to the required information with the respondent being more relaxed and honest. During this research it was important for the interviewer to be very aware of the impact on the interviewee and their responses. Other objectives were: to choose an easy and comfortable environment for the interviewees so that they could speak honestly, control reactions so not to bias a response, and attempt overall to be flexible in their approach (MacNaughton Rolfe & Siraj-Blatchford, 2005). The personal interview communication skills used focused on interaction, interpersonal and non-verbal communication. Active listening was vital to how the information and interview progressed as this allowed the gathering of richer data.

3.3.2.2 Design of interviews

A qualitative and quantitative approach to the interviews was used comprising face to face and single interview typology. The objectives of the questions within the interviews were to glean as much information as possible from the research questions. The order of questions was not fixed or rigid and open-ended questions were employed.

- **Methodology**
  - Qualitative
  - Single interviews
  - Face to face
  - Open ended questions

- Semi-structured

- **Sampling**

The Sligo County Childcare Committee was the sampling source for childcare workers' contacts. Purpose sampling was employed which centred the research sample on those who were relevant to help answer the research questions. (Bryman, 2004).

- **Subjects/Informants**

  - Two different groups of childcare workers from each of the pre-school systems.
  - Those who are actively involved in the art classes

- **Construction of interview questions:**

  - How did you become involved in this preschool system?
  - What do you see as the principal aims for the use of art through this system?
  - What are the factors for a successful art experience?
  - What are the difficulties?
  - How comfortable and experienced do you personally feel about art?
  - How is art used for child development or education?
  - What space is provided?
  - Where is the adult placed in this environment?
  - What are the limitations of relating theory to practice?
  - How much input does the child have in this process?
  - How do you evaluate the art experience?

3.4 Quantitative research

Quantitative research deals with the empirically measurable aspect of its objective. It endeavours to assemble data through objective methods by providing information

about relationships, similarities, and calculation, thus attempting to eliminate the researcher from the study (Smith, 1983). The quantitative researcher relies on statistical information rather than the context of a situation or experiment. It uses valid sampling and significant techniques to focus on the measuring of facts and the relationship between the variables (Pole & Lampard, 2002). This allows the researcher to obtain an accurate picture of a particular phenomena looking at rarity and frequency. Quantitative research classifies features and counts them in an attempt to create a multifaceted statistical model that acts as a description of what is being observed (Bowland, 1998). Quantitative methods in this research are: questionnaires, data collection using the observation tool in pre-school art-time and the art workshops phases, as well as the triangulation of findings for analysis.

3.4.1 Questionnaire methods

Ethnographic methods were employed through interviews within the observation phase of the pre-school art time. However, with a view to facilitating the triangulation of findings a further quantitative method was needed and thus a questionnaire was included in the research. In agreement with Clough and Nutbrown (2007), the questionnaire followed the rules of radical questioning by asking - How much information, questions and methods are needed to answer the research questions? In choosing construction methods, structured, semi-structured and unstructured were considered. Since from the above, the subjective inductive data was already collected, a structured approach was deemed appropriate. The Considerations for the questionnaire were:

- Multiple choice questions
- Sequencing of questions
- Rank ordering
- Asking sensitive questions
- The layout of the questionnaire

Cohen, Manion & Morrison, 2007)

There are good reasons sometimes for "asking the same question in both open ended and close ended form" (Nachmias & Nachmias, 1987, p.212). The respondent can give a different or fuller answer for reasons such as memory lapse. When analysing a questionnaire Graue & Walsh (1998) suggest that the researcher first looks analytically at the responses and concerns from the questions then reviews what other issues have been brought up by the questions. The research developed this thinking by incorporating the use of previously open ended interview questions as closed types in the questionnaire.

3.4.2 Design of questionnaire

This research followed the Robson (1998) five point rule in structuring the questionnaire by employing: introduction of purpose, warming up with non-threatening questions in the main body and leaving the 'risky' questions near the end; cooling-off with easy questions and closure with good-bye and thank-you were not deemed necessary for the purposes of this study. Similarly, it was not deemed necessary to include scaled answers to understand how strongly the respondents felt on certain issues (MacNaughton, Rolfe & Siraj-Blatchford, 2005). In this way every measure was taken to protect the sensibilities of the subject group. This questionnaire was structured with the following methodology.

Methodology

Quantitative
Emphasising closed ended questions

Sampling

The Sligo County Childcare Committee was the sampling source for childcare workers contacts and the St Nicholas Montessori College. Purpose sampling was employed which centred the research sample on those who were relevant to help answer the research questions. (Bryman, 2004).

Subjects/Informants

Two different groups from separate centres from each of the pre- school disciplines
Those who are actively involved in the art classes
The list of accredited Montessori teachers

Construction of Questionnaire questions

This was the main point of the quantitative phase of research. The aim was to get a standardized overall picture and history from all the childcare workers of their training in their chosen pre-school methodologies, qualifications in childcare, years of childcare experience, art teacher experience, views held about educational aspects of art and personal views on art development. The following were the questions included:

- How long are you working in childcare?
- How long have you worked within this pre-school system?
- What training/education/qualifications do you hold in this pre-school system?
- What art training/qualifications do you have?
- How do you facilitate art?
    - Empathy
    - Direction
    - Guidance
    - Control
- How is the art space used?
    - Physical shared space

- Individual space

- How is art viewed?

  - As achievements
  - Rewarded
  - Not Significant

- Is art used for any objective development?

  - Artistic/Expressive
  - Social/personal
  - Cognitive

- Are there any other reasons?

Space for answering was streamed years in scaled tick boxes for the first two questions. Question three was answerable within pre-defined qualification boxes with space for exceptions. In Questions four and five space was offered for the respondents to elaborate on their answers, while in questions six to nine tick boxes were offered as above. In question ten, again space was given for the respondents to elaborate on their views.

In considering the categories for response to question six - 'How do you facilitate art?' clarification was needed in order to define what the use of each style of facilitation meant within the scope of the research. This was because situations can easily be conceived where these are used in combination. Similarly, using these facilitative styles in shifting contexts does not lend itself simply to generalising their prescriptive use. The categories chosen were nonetheless instrumental in the quantification of instances of facilitative use in the observation tool and by reflecting this, their inclusion in the questionnaire added much to the analysis of theory to practice. In doing this the triangulation of both the questionnaire data and the

observation tool data which measured specific instances *in context* implies that only a definition of each style is necessary here. These are as follows:

- Control

  Child has no choice in access to, use, or organisation of time, space and materials. Both Process and Product are defined and exactingly and correctively facilitated.
- Direction

  Child has some choice in access to, use, or organisation of time, space and materials. Process and Product are defined within bounds and facilitated with instructively.
- Guidance

  Child has more choice in access to, use, or organisation of time, space and materials. Process is explorative. Facilitator enters into explorative aspect with child thus co-operates in determining the product.
- Empathy

  The facilitator is reacting to the child's self guided activity.

This information was made clear to the respondents before taking the questionnaire. Care was taken to point out to the respondents that despite the above definition these are nevertheless *styles* of facilitation and as such should be answered with reference to their predominant usage.

3.5 Art workshop action research method

The art workshops were the foundation of the second phase of the primary research. The aim and objective was to gather as much information on the practice of art through each pre-school system for the analysis. They were held in a physical room within a HighScope childcare centre in which twenty children from the pre-school class were used for this observational purpose. The overall design of the art workshop action research phase was based on the findings from the observation of pre-school art time and the invaluable use of the interviews and questionnaires. The research needed to understand how the environment and the facilitation supports and influences the

child in the art experience and their creative development through art. This was accomplished through the secondary literature by gaining an understanding of creative development in the visual arts specifically reviewing the educationalists' and creative theorists' view points. This assisted in the development of criteria and skills necessary for the recognition and observation of creative development and supporting skills. As part of the primary research, three community artists who work with art and young children were interviewed. Their collective viewpoint was that early years teaching should be a process of the child being actively led forward during which the child should be allowed to reflect on what they know, thus developing through making connections. All of the above was done in order to hone the practical skills needed to deal with children and art using best practice.

The preparation of the physical learning environment, the facilitative methods and the content of each pre-school art workshop were created through the pre-school art time observation notes. The interviews of all the childcare workers from each setting were also necessary to further understand their reasoning on the relationship between theory and practice, thus connecting the literature theory to practice in the construction and rationale for further analysis. These interviews expanded on other art activities and projects that the children would engage in, by asking the respondents about their documented schedules, thus also filling in details about routine elements that were unavailable to the observation due to time constraints. The viewpoints of the various Irish government agencies, their national pre-school policy and curriculum, provided a context for the educational teachings of art in Mainstream pre-school. The study of the HighScope curriculum, Maria Montessori educational publications and Steiner Waldorf educational literature focused on their principles and educational teachings through art. This was used in conjunction with the primary research observation notes to better represent the practice of these theories.

A planning cycle was utilised to refine the objectives by asking questions before and after the workshops, beginning with the following:

- What is the aim of the activity for the child?
- What resources are needed for the activities?

- What is the adult's role in this activity?

(Harding & Meldon-Smith, 2006, p.9)

Then, on reflection when the workshop was finished:

- In implementing the activity, what is the child's response?
- Write down the outcome, assessing if the aim of the activity achieved.
- Evaluate the outcome.

(Harding & Meldon-Smith, 2006, p.9)

3.5.1 Design of art workshops programme

A six week workshop was put in place for each pre-school. These were held in a physical room in a childcare centre. For the data collection within the art workshops, the children were studied under a standard set of conditions and received identical instructions in the same manner (Aubrey et al. 2000). The art workshop format involved rotating every six weeks with each group then moving into a different art methodology and staying there for the following six week art workshops:

Figure 4 Table of art workshop programme schedule.

Group	Art Methodology	
Group A	HighScope	
Group B	Steiner Waldorf	Run for 6 weeks
Group C	Main Stream	
Group D	Montessori	

Group	Art Methodology	
Group A	Steiner Waldorf	
Group B	Main Stream	Run for 6 weeks
Group C	Montessori	
Group D	HighScope	

Group	Art Methodology	
Group A	Main Stream	
Group B	Montessori	Run for 6 weeks
Group C	HighScope	
Group D	Steiner Waldorf	

Group	Art Methodology	
Group A	Montessori	
Group B	HighScope	Run for 6 weeks
Group C	Steiner Waldorf	
Group D	Main Stream	

The art content of each pre-school six week programme was the same for each group, so all the children experienced the layout and construction of each pre-school method. This aided the comparative analysis of the child's response, interaction and performance.

3.5.2 Art workshop construction and rational

The content construction of the pre-school art workshops were informed by their pre-school art theory and then formed through, observation notes from pre-school art time, interviews and questionnaires with a view to presenting the most realistic representation of the practice previously observed. In this way the aim was to make the art workshops as much like the observed environment and practice of each pre-school method as possible in order to observe it for a longer period of time.

3.5.3 Mainstream art workshop practice construction and rational

3.5.3.1 Facilitation

Each session started with reading the story and reminding the children of what they created the previous week and what they would be creating this week. The book chosen for the six week session was the Gruffalo (Donaldson, 1999). By reflecting on the environment during the storytelling, the children used colours to develop the use of their senses, thus aiding cognitive and perceptual development. The objective was to encourage the children to talk about sounds and smells in the story and emotions they might feel to support this learning (Beaver et al. 1999; Bruce & Meggitt, 2005). The art class aim was to work towards the monthly theme by a repeated process of art production thus assisting the children to make connections in their learning (Beaver et al. 1999; Bruce & Meggitt, 2005). Most product- based art was initiated by the adult, showing the end product and what the children were expected to produce (Observation, Dec. 2008). Pre-cut products were habitually used as dexterity of skills in cutting are not developed until the ages of 4-5 years and upwards. Process variables noted from observation action phase for adult facilitation in the creation of the physical learning environment highlighted that the adult should have total control over the art work space and semi- control over the rest of the space.

They should guide the children with direction and verbal control, giving more direction to younger children over the group. The control over time and materials vary from total control to semi- control and were reflected as such in the workshops (Observation, Dec. 2008).

3.5.3.2 Preparation of the practical physical learning environment in Mainstream

The environment in which pre-school art is facilitated will affect the scope of children's creativity, thus a stimulated environment where they can experiment and explore will give them a wider range of opportunities and developmental learning (Bruce & Meggitt, 2005). This is the *theory* for mainstream art time but as stated earlier during the observation, the children were presented with a picture or an

example of the readymade product which they were to produce. This practice did not afford the children much opportunity to explore and experiment. Art work on walls reflected a colour, topic or animal of the month illustrating the changing of the seasons to support the recommended learning which is key in their environmental theory. A communal table was placed in the room for the children in art time so aiding them to share materials. This also functioned as a collective viewing point where the adult was able to display a prepared product or picture and explain what the children will be producing. Music was played from a tape in the background some times (Dublin: CECDE, 2006; Observation, Dec, 2008). Presage variables from observation action phase for class room environment construction, noted that art time is run in a general room using communal space providing some individual work with a product based finish/Educational and functioned within a mixed age group (Observation, Dec, 2008).

3.5.4 Steiner Waldorf art workshop practice construction and rational

3.5.4.1 Facilitation

Before the start of the art time the children were led to sit down in a circle and tell stories reflectively (Observation, Dec. 2008). One tenet of Steiner Waldorf education is that stories feed the soul thus creating images which children take through life (Oppenheimer, 2007). Just as important as the story is the tone used, thus songs with activities and nature stories were conveyed tunefully (Muller, 2004; Petrash, 2007). Each art time was started this way with a poem, not from a book but from memory, so the children would be present in the moment, as in Steiner Waldorf education the story is seen as a creative act, with the adult sensing the right pace and words (Interview, Feb 2009). Steiner believed that encouraging the children to use colours from the visual imagery helps them to be more receptive for the creative act (Muller, 2004). An example of a poem used before art time:

"Spring
Now daises pied, and violets blue,
And lady-smocks all silver white,

And cuckoo-buds of yellow hue
Do paint the meadows with delight,
The cuckoo now on every three
Sings cuckoo, cuckoo"
(Cooper et al. 2005, p.1)

As Steiner Waldorf theory supports the human connection in the act of spontaneous creation, elements from nature through the colours of the seasons were, discussed at the nature table to reflect nature through animal shapes or elemental objects (Cooper, Fynes-Clinton & Rowling, 2005). After each art time the child were instructed to tidy away and sit and wait for all the children to finish before moving on to another activity. This is a key aspect in Waldorf education through which children learn social awareness and responsibility, thus discouraging them from rushing through the process (Oppenheimer, 2007). Process variables noted from observation action phase for adult facilitation in the creation of the physical learning environment, highlighted that the adult should have total control of the space. Similarly, the adult should have semi- control over time, materials and workstation. Also, within the Steiner Waldorf physical learning environment, the adult must embody thinking/feeling/doing and willing and the children must enter the environment where the adult is doing something practical (Cooper, Fynes-Clinton & Rowling, 2005, 2006). The adult facilitated with empathy and guidance while walking around, reminding them how to clean a brush before applying the next colour and only spoke when spoken to, so as not to affect the children's concentration (Observation, Dec, 2008; Feb, 2009). The adult also joined in painting and drawing thus showing from example an appreciation of things. Examples of this included not pushing too hard on the paper and reverence for the materials.

3.5.4.2 Preparation of the practical physical learning environment in Steiner Waldorf

The facilitator in preparation of each painting session used ready mixed paint to dilute each colour into individual jars for each child. Every child was given a water jar (Muller, 2004). Then each child prepared their page by placing it on their painting

board and wiping it over with a wet sponge, side to side (Observation, Feb, 2009). Only when all this was done, was the child permitted to lift the brush so that they were not rushing from one activity to another. Steiner believed that by not rushing into painting, children will be helped to collect their thoughts and have more control, thus not ruining the picture (Oppenheimer, 2007). The best way to introduce colours to children is through dilution of colours and giving them the brush, developing their love of colours which Steiner believed can stimulate them to share the experience with those around them (Muller, 2004; Cooper, Fynes-Clinton & Rowling, 2005). Use the colour blue at winter and yellow in the spring time then when mixed together makes green. In summer "red and yellow makes a shining orange" explains Muller (2001, p.32). Muller further explains that children can form a deep association with colours from stories, for example, Red Riding Hood. Presage variables noted from observation action phase for class room environment construction were followed, thus the art was run in a general room with communal space and individual work/spontaneous art was provided for (Observation, Dec, 2008; Feb, 2009). Within the two pre-schools observed and in the research of Steiner Waldorf literature and Steiner's work, these were the key environmental essentials which became construction objectives. A nature table present in the art workshop room was used to reflect the changing seasons and their associated colours (Muller, 2004). Nature is an essential element in the creation of the Steiner Waldorf environmental classroom reflecting Steiner's strong educational connection to nature. Elements of the mineral, animal, plant and human kingdom were reflected through the objects displayed on the nature table (Observation, Dec, 2008); supporting the reverence the children are developing to all natural elements (Oppenheimer, 2007).

3.5.5 Montessori art workshop practice construction and rational

3.5.5.1 Facilitation

The role of the facilitator was to introduce the children to new equipment, and to let them watch and learn how it was used properly until they could work competently with it on their own (Lillard, 1996). The adult observed in order to gain awareness of each child's level of ability within each activity and encouraged the development of

new skills when appropriate (Buckenmeyer, 1997). Process and presage variables noted from the observation for the role of adult were: their semi-control over space and time; and varying amounts of total and semi- control with materials were replicated in these sessions. The workstation was facilitated with semi-control and led with empathy, direction and guidance while the adult again facilitated directly, according to the individual child's ability (Observation, Dec. 2008).

3.5.5.2 Preparation of the practical physical learning environment in Montessori

The Montessori environment is a well crafted and organised space and the following key points were observed as well as researched in the Montessori publications. An easel was provided in the classroom so the child could paint upright, a paint coat was provided with brushes in paint pots and paper at the ready (Buckenmeyer, 1997). This was to support the child in choosing their own activity with ease. The standing easel, Dr. Montessori believed, was the best position for a child to paint. All equipment on the shelves was accessible. Each child had a personal inset/drawing folder with colouring pencils beside metal inset stands. This supported the children's accessibility to activities of their choice (Lillard, 1996; Buckenmeyer, 1997). Also offered was a shelf with paper scissors and crayons for children to use as part of the Montessori classroom structure. The room provided 3 work tables (1 dedicated to painting) and six child- size rugs. (Costello, 1972; Montessori, 2003; Observation, Dec, 2008).

Presage variables noted from observation noted that this classroom environmental construction provided for art time in part of a room with individual tables for the children's activities. Montessori practice uses communal space for individual work which has an educational function in a mixed age group (Observation, Dec, 2008; Jan, 2009).

3.5.5.3 Group art activities

The group art activities were facilitated in much the same way as the rest of the Montessori pre-school activities. A Montessori pre-school teacher who was previously observed provided three group activities for the art workshops. These activities were chosen by the Montessori teacher as they aided the children with

indirect preparation for writing skills, a follow- on from the practical life skills studied elsewhere in the curriculum, and the cleaning up process to develop their personal responsibility (Costello, 1972; Lillard, 1996; Buckenmeyer, 1997; Montessori, M. 2003).

The first activity was bubble painting. The facilitator provides a small cup, washing up liquid, straw, paint, water and paper; the children blow bubbles with a little paint in the mixture and watch them drop onto the page. This activity, besides its obvious aesthetic value, improved the children's manual dexterity, hand to eye co-ordination and a range of associated cognitive skills. The second activity was named "marbles in a shoe box". Similarly the facilitator provided a shoe box lid, paper, paint, marbles and spoon. A page was placed in the lid of the box for each child. Two marbles were then placed in a cup with thick paint and the spoon used to firstly stir the marbles until covered and then take them out and place them at the edge of page. The child then tilts the lid sending the marbles around the page and leaving coloured trails. Again this activity offered a broad range of developmental areas including aesthetics, motor skills and associated cognitive development. The third activity was "spinning top" involving the use of a cereal box, pre-cut circle shape to trace, scissors, colouring in-pencils and chalk. A circle was traced on the cereal box and then cut out, making a disc. With the help of the adult, lines were drawn across the disc dividing it into segments. The children coloured in the triangles and made holes in the middle for chalk, thus creating a spinning top. Again this activity offered a broad range of developmental areas including aesthetics, motor skills and associated cognitive development (Interview, January 2009).

3.5.6 HighScope art workshop practice construction and rational

3.5.6.1 Facilitation

The HighScope curriculum implements the use of the 'plan-do-review' daily routine to make the art experience a meaningful and individual experience for each child. At the start of each art workshop, the children were led into what they were to create in the art session. The themes of the first three weeks of the art workshops were the

colour yellow, and patterns. These were followed and developed through the book 'Patterns' (Pluckrose, 1988), the story of the Hungry Caterpillar (Carle, 2002), Van Gogh's 'Sunflowers', and leaves and flowers from their outdoor area. To support this, a wall display, books, nature and discussion around what is being created were utilised, thus assisting connections in their learning (Epstein & Trimis, 2002). Again, as part of their curriculum, they use 'recall' time at the end of each session for reflection. This reflection is structured as thinking 'in' and 'about' art so the children become aware of their own and others' interactions with materials and concepts (Hohmann & Weikart, 2002; Hohmann, 2008). During the second two weeks of the art workshops, the in-depth studio approach was used in order to introduce music and movement in the art making process thus developing the children's other senses to support cognitive and perceptual developmental outcomes (Epstein & Trimis, 2002). In the final week, the art workshop consisted of free play art in the children's own class room in line with the HighScope curriculum. This offered the children freedom of choice and allowed them to make their own decisions through the materials provided. (Hohmann & Weikart, 2002; Observation, Dec, 2008). Process variables noted from the observation of adult facilitation within group art were total control over space, materials and workstation; the adult was directive and used guidance but allowed semi- to total control of time. Free art was facilitated by the adult stepping out of the art space and giving children complete control over materials, movement and space and semi control over time. (Observation, Dec, 2008).

3.5.6.2 Preparation of the practical physical learning environment in HighScope

The adult worked quietly beside the children sharing discoveries and providing new challenges within their environment, thus supporting cognitive development and strengthening their independence within learning (Epstein & Trimis, 2002;
Hohmann & Weikart, 2002: Hohmann, 2008). In the pre-school observation and the HighScope literature researched, these were the key environmental essentials and were hence taken as construction objectives. The room had a communal art table, a shelf for the art materials and a selection of books, to support the wall display art project the children were engaged in. The space was well structured with all materials

accessible to the children (Hohmann & Weikart, 2002). The wall display included the colours and animals of the month and this was added to by their group art work on the weekly projects. An extra wall space was provided for their own individual art (Epstein & Trimis, 2002) to support their achievements and creations. The children were also provided with folders in which to keep some of their art, all of which mirrored the curriculum and practice.

Since the research was based in a HighScope childcare centre the free play art environment, which was already in place in the pre-school room was used. This pre-prepared space had a central table with chairs arranged around it and bounded by drawers and shelves with pictures of the contents i.e. plain or coloured paper, scissors, paints, crayons, glitter and rulers (Epstein & Trimis, 2002). Presage variables noted during the observation time of free play art were used to construct this art workshop environment, thus allowing free play art in a communal space. Presage variables noted from the observation time in group art projects were also used, in this case the construction of a general room using shared and communal space for the group art.

3.6 The construction of the observation tool

The secondary research formed the basis of the observation tool which was implemented through the primary research phases. As previously mentioned this was to assess how each pre-schools art practice through their environment, their facilitation, their objective of the art exercise impacted on the child's creative development and associated learning. Eglinton (2005) states that art assessment and analysis in the early years is carried out through in-depth "sensitive observation' of the entire experience and the subsequent reflection and 'interpretation of what is noted" (p.60). The structure of recording for analysis can be created through many methods. Mac Naughton, Rolfe & Siraj-Blatchford (2005) illustrate: running records where the observer writes everything being said or done, anecdotal records being written objectively after the event, a checklist where the researcher has a list of behaviours and ticks them off and rating scales for intensity or frequency of an event. As this research employed participant observation a checklist was considered the most acceptable format since running records or anecdotal records would have obstructed

participation. The checklist is commonly presented with the behaviours on the right and boxes on the left with space in-between to record the event in context. However in keeping with the paradigm of Anti-positivism and since this research incorporated a wide variety of categories and variables, it placed great emphasis on the context notes by separating them out spatially and thus giving more space for description. Thus, trying to unite "description to interpretation" by the "understanding of context" is helped through widening the focus to take in as many significant aspects of experience as feasible (Graue & Walsh, 1998, p.191).

With a view to the choice of categories, Mac Naughton, Rolfe & Siraj-Blatchford (2005, p.231) state that to increase objectivity while recording, "careful definitions of target behaviours" need to be in place as an analysis device. They feel that behaviours are described as "a continuous stream of movements and events" (p.234). To measure these movements and events they must be categorized and defined. For concepts to be grouped into categories a coding of analysis needs comparison, conceptual labels and discrete happenings, then looking further at the components of communicated messages, available tools used, relationships and interaction (Grave & Walsh, 1998). A method for an observation tool for the art workshops could be made with a coding system so by identifying any relationship between dependant and independent variables as defined by Aubrey et al. (2000). Independent variables are events and it is their functional relationship between environmental variable and behaviours which form the purposeful analysis of behaviour so creating a description and identification of them both. Below are the variables I shall be observing and analysing in context within each pre-school art system.

Context Variables

Figure 5. Table of context variables.

Presage Variables	Process Variables	Product Variables
Already present when learning commences: characteristic of teachers and learners	Describe actual behaviour in classroom	Learning outcomes: changes in attitudes, knowledge, skills, etc

Aubrey et al. (2000, p.70)

There are key ingredients in the pre-school classroom environment that offer positive effects for children outside the activities and play time (Aubrey et al. 2000). Their emotional stability, present contentment and later achievements are affected by these key factors. Aubrey et al. (2000, p.12) defines them below:

- The development of self-esteem in young children
- Investment in young children
- Stable childcare arrangements ensuring children interact with a limited number of familiar carers each day
- Low staff turnover
- Low adult-child ratios

These Presage Variables were used to form a more complete view before doing the primary research observation.

Creativity is difficult to observe and analyse so operational definitions needed to be made. Within the literature there is precedent evidence of areas of assessment and analysis in pre-school art education and development (Eisner & Ecker, 1966; Barnes, 1987; Gardner 1988; Wright, 1994; Herberholz & Hanson, 1995; Eglinton, 2005). Areas identified as assessable are: perceptual awareness, cognitive development, social and personal development and expressive development which are outlined by Eglinton (2005, p.58). This process resolved itself in the adding of the following list of headings and subheadings to the tool.

Figure 6. Table of areas of art assessment.

Perceptual, aesthetic, and cognitive development
Engages in discovery and investigation
Notices details
Exercises perceptual discrimination
Builds on prior information
Uses the senses to extract information from the environment
Reflects on own works of art
Reflects on own artistic process
Sees connections in artistic experiences
Connects encounters with art to own art making experiences
Sees similarities and differences in objects and works of art
Understands nature's role as provider of media and inspiration
Develops and decodes simple symbols

Technical skill and use of art media
Uses two-dimensional media with purpose
Uses three-dimensional media with purpose
Can handle a selection of drawing tools with dexterity
Can handle a selection of painting tools with dexterity
Understands and uses natural objects as art media
Chooses suitable media to task at hand
Consistently developing new skills and techniques
Is inventive with art media
Builds on previously learned skills and techniques

Expressive and artistic development
Is able to give form to expression
Overcomes obstacles in the giving of form to expression
Demonstrates progression through stages of artistic development
Understands art as a way to express thoughts and ideas
Uses creative thinking in the giving of form to expression
Is inventive in expression
Uses art as a mode of communication

Social and personal development
Engages in dialogue about art with other children and staff
Treats own art, art of others, art reproductions, and objects with care
Takes turn leading projects and allowing others to lead
Cares for art media, natural objects, and natural and constructed environment

Eglinton (2005, pp.58-59).

The context of the setting also needed evaluation under headings of physical learning environment, social and emotional learning environment, art materials and facilitation practices (Simon, 1980). These categories were therefore also added to the tool.

3.6.1 The role of the social play continuum

During observation in the first phase of primary research, it was found that the observation tool did not offer enough detail in the categories it employed to fully depict the social aspect of creative thinking and development in the art experience. In parallel with this, it was found that the procedural limitations of recording large amounts of behaviours with multiple subjects in group based activities needed addressing. In looking for a solution to these issues the secondary research was consulted. Therefore in the second phase of the primary research, the social play continuum was added for use simultaneously with the observation tool to convey a constructed sense of continuity in the development of the children's engagement. It focused on the growth of the language and action highlighting the social, emotional, creative and cognitive development through six defined areas of learning (Broadhead, 2005). It used detailed description of actions and language to place each child in the correct social domain thus allowing an analysis of how the facilitator's action and language guides or supports this. Care was taken not to record the behaviours associated with lower domains when the child was operating in a higher domain. The six defined areas of learning were:

- Personal, social and emotional development (PSE)
- Communication, language and literacy (CLL)
- Knowledge and understanding of the world (KUW)
- Physical development (PD)
- Creative development (CD)

The four domains of the social play continuum are as follows:

- **Associative Domain**

  Parallel play is action based with imitation and watching. Self talk, thinking out loud. Commenting on an action (is the start of reciprocity by raising voice and watching)

- **Social Domain**

  Smiling and laughter are now more evident and play noises are to attract attention (all building towards reciprocity). Eye contact more important given and returned giving more interaction between peers. Altercation is fixed by compromise. Language is seeking approval, instruction, and asking questions though this is still sporadic (double check approval with commenting on their action)

- **Highly Social Domain**

  Sharing and offering more integrated. Reciprocity levels increase with the use of language rather than just facial expression (still important). Playing becomes longer. Shared understanding of theme increases. The Children are now using their own experiences.

- **Cooperative Domain**

  Sharing and offering which extends the theme. Objects are incidental to the problem solving, relationship building and goal achievement building. All engaged completely in activity and dialogue supports this by describing what they are doing (no play noises). Helps peers to achieve goals both verbally and physically and uses sources to develop idea and achieve goal. They add own experiences and seek out objects to develop theme.
  (Broadhead, 2005).

3.6.2 The social play continuum

The social play continuum short hand was used when check listing the language and actions set to be recorded. This made it ideal for observation purposes.

- Language (L)
- Reciprocal language (L)
- Action observed (A)
- Reciprocal action (RA)
- Language and action combined (L/A)
- Reciprocal language and reciprocal action combined (RL/RA)
  (Broadhead, 2005, p.42)

Social and emotional growth and creative development were identified by looking at the combination of language and action within the four domains. Actions and language focused on: imitating play, offering/accepting of object events, sustained dialogue and verbal/physical help. All helped to support some defining actions of social and emotional growth. While similarly other noted actions and language such as: problem solving, new ideas extending play theme and describe intent and explanations again support areas of creative thinking and development. Detailed below is the research's classification and identification of action and language or their combination, identifying the growth and impact of creative development and social and emotional growth staged within the four domains.

Social and emotional

- Collaboration:

  - C-OD Offering/accepting objects sustains/extends play.
  - Verbal/ and physical help offering and accepting
  - Child display shared understanding of goals
  - HSD Brief reciprocal

- Offering/accepting object event

- Listening/problem solving/task persistence:

  - C-OD Problem identified and solved
  - Offering/accepting object sustains/extends play theme
  - Sustained dialogue is activity-related & clear theme emerges
  - HSD Describe intent with acknowledgement leading to extend exchange
  - New ideas have impact on developing theme
  - SD Instruction given, positive response
  - Approval sought and given

- Appropriate self expression

  - C-OD Sustained dialogue is activity-related and clear theme emerge
  - HSD Comment on own action/eye contact/laughter combined as behavioural cluster
  - SD Instruction given positive response
  - AD Imitates play/watches play

Creative development

- Expressing & communicating

  - C-OD New ideas/children display shared understanding of goal/explanation
  - HSD New ideas have impact on developing theme/ Comment on own action/ Described intent with acknowledgement leading to extended exchange
  - SD Consent sought and object accessed

- Exploring & experimenting

  - C-OD Explanations/new ideas/extends theme play
  - HSD New ideas impact on developing theme

- SD consent sought and object accessed
- AD Imitates play

- Using imagination

  - C-OD New ideas/ offering/accepting objects sustains/extends play theme
  - HSD Offering/accepting object events/ sporadic dialogue develop role theme
  - AD Self talk/watches play/imitates play

- Responding to experiences

  - HSD New ideas impact developing theme/ offering/accepting of object event
  - SD Instruction given, positive response
  - AD Imitates play

3.6.3 The observation tool

The art workshop observation tool was constructed under consultation with a qualified psychotherapist and State Registered Art Therapist. The use of the art-therapy child art study observation notes, (Simon, 1980) added a further qualitative dimension to its content thus placing the art experience in an overall context. The observation, while focusing on the facilitation and environmental factors within each pre-school, also looked at how they limit or increase the creative development and supporting skills of the child in the art experience. Considerations which influenced the construction were:

- Do they know the material properly?
- Are they ready to learn a new skill?
- Can learning be extended by introducing a new skill?
- How does the child turn expression into form?
- How do they seem after expressing in visual form?
- Are they satisfied with their work?

(Eglinton, 2003, pp.61-62)

All of the latter were incorporated into the tool.

The observation was recorded in a naturalistic setting. For analysis the observation employed the method of a checklist of behaviours which were ticked off once recorded.

Figure 7. Table of context variables within the observation tool.

Presage Variables	Process Variables	Product Variables
The physical learning environment. Social and emotional learning environment. Art materials and teaching practices: Are they ready to learn a new skill; can the learning be extended by introducing a new material?	The process the child uses within the experience. Facilitation. Environment. Dialogue: what do their visual outpourings tell you most; do they work as a team; are they engaged or detached?	Perceptual awareness. Cognitive development. Social and personal development. Expressive development: Do they use expressions in dialogue and picture; how do they seem after expressing in visual form; do they seem happy with their work?

Eglinton (2005, pp. 61-62)

Behaviours were only recorded in the classroom during the interaction in this environment and in the course of the activity being researched (Aubrey et al. 2000).

Within the observation tool the presage and the process variables were placed mainly in the qualitative section under the child art study observation notes. These headings covered the environment, facilitation and the child during the art experience. The environmental categories recorded the physical and structural art space, including the objective of the art exercise and age group of the children. The structure of the environment was sub-categorised under the provision of the art space be it; individual or shared/communal tables or areas. The objective of the art exercise was sub-categorised under; individual, group, product based finish, educational function or play/spontaneous art work. The facilitation headings covered the adult's gage of control over the art experience and how they led the art exercise. These areas were sub-categorised observing the amount of control the adult had over the art; space, time, materials and workstation. It also noted if the facilitator led with; empathy,

direction, guidance or control while further assessing if the adult introduced a new skill and extended the children's learning by doing so. The child headings covered the type of art process used (movements), colours used, mood of the children, their dialogue, and their social, emotional and cognitive behaviours. The sub-categories within the type of art process or movements noted during the art experience were recorded under; rapid smearing, daubing, slow curing lines, straight lines and objects (people or things). The colour usage noted if they employed; single, few, bright or dark colours and if they over painted. The recording of the children's mood were assessed before, during and after the art experience under the categories of; happy, sad, angry or apathetic. Their dialogue was noted under the sub-categories of; child to child, to themselves (self-talk), child to adult or group conversations. The social behaviours were identified under; quarrelling, engaging, comforting or detached. The emotional behaviours defined within the sub-categories were if the child was happily or not engaged with; the adult, the other children or the art experience. The cognitive behaviours were noted under two sub-categories of either sustaining attention during the activity or easily distracted. The product variables were recorded within the learning through art section which covered the art areas of assessment. These were constructed through four main areas of observation with sub- categories to identify actions of growth which are seen previously in figure 6 (Eglinton, 2003). The constructed observational tool can be reviewed in the appendix. The social play continuum was used in addition with the original observation tool in the second phase of the primary and is as follows:

Figure 8. Table of the social play continuum.

The social play continuum			
Observation start time: Observation finish time: Area of provision:		Children entering play: Children leaving play:	
L = Language observed RL=Reciprocal language	A= Action RA = Reciprocal action		L/A = Language and action combined RL/RA = Reciprocal language and reciprocal action combined
Associative Domain	Social Domain	Highly Social Domain	Cooperative Domain
A: looks towards peers/Watches play/Imitates play/Object offered but not accepted L: Self-talk A/L: Object taken, altercation/ comment on action directed at peer, peer does not respond	A: Smiling/laughter/ L: Instruction given, no response L/A: Consent sought and object accessed RL: Approval sought and given L/RA: Instruction given, positive response	RA: Offering/accepting of object events RL: Comment on own action/described intent with acknowledgement leading to extended exchange. Sporadic dialogue develops role play themes RA/L: Eye contact/laughter, (play noise) combined as behavioural cluster RA/RL: Brief reciprocal – giving/following instructions RL/RA: new ideas have impact on developing theme	RA: Offering/accepting objects sustains/extends play theme RL: sustained dialogue is activity-related and clear theme emerge/ explanations/offering and helping verbal help RL/RA: New ideas/children display a shared understanding of goals/problem identified and solved/ verbal and physical help combined/ offering and accepting physical help

(Broadhead, 2005)

3.7 Ethical issues

The ethical principles underpinning this research were to provide and verify confidentiality to all those being interviewed and under observation, with continued emphasis on their right to withdraw at any stage. The researcher provided anonymity to the interviewees, ensuring their confidence that identities would not be exposed in any way (Baker, 1994). The majority of this research was qualitative and thus it may have more ethical issues:

'This is because the research involves collecting data from people and about people' (Punch, 2005, p.276)

The role of the researcher was transparent in all aspects of the work and assurance was given that transcripts were coded, thus no names were used. Similarly the names of premises used during the research were withheld for confidentiality purposes. Respect was shown for all information gained and the researcher treated the subjects as they would wish to be treated, with personal dignity (Kor, 1992). Written and verbal assurances about purpose and confidentiality were presented and a code of ethics for social care research was provided. This maintained an active personal and disciplined ethical awareness and took practical and moral responsibility for the work (Butler, 2002). Informed consent included confirmation that respondents wished to be involved, an assurance that they could withdraw at any time and that they would be notified if the information was published (Greig & Taylor, 2004). Letters were sent out to all parents of the children under observation through the childcare workers. Interviews were held in a confidential environment with the researcher personally carrying out all interviews for consistency. Interview arrangements were at a time and place comfortable and suitable for the interviewees (Cohen, Manion & Morrison, 2007). Before the interviews and observation time they were assured that their decisions were given freely and that the research was independent and legitimate. They were told why they were selected, clearly informed about the objectives and intended use of the research and further reassured by information on what to expect in correcting misunderstandings. During the interview or observation the interviewees

had the opportunity for self expression while feeling comfortable, valued and respected rather than intimidated or judged. Moreover, during the interview it was important that they were allowed to exercise the right to say as much or as little as they wished. Afterwards, the interviewees were given the opportunity for feedback on findings or use; the right to privacy and anonymity with respect to storage and access to reporting was reconfirmed (Graham, Grewal & Lewis, 2007). The following table show key findings from a research ethics paper highlighting how participants wish to be approached before, during and after interview:

Figure 9. Table of interview ethics.

Before interview:	During interview:	After interview:
Unpressurised decision-making	Able to exercise right not to answer or say more than wished	Right to privacy & anonymity respected in storage, access & reporting
Research independent & legitimate	Unpressurised pace, time to think	Unbiased & accurate research & reporting
Knowing why selected to be approached	Feeling comfortable, valued and respected, not intimidated or judged	Opportunity for feedback – findings & use
Objective & intended use, clear and worthwhile	Opportunity for self-expression	Use made of social research for wider benefit
Knowing what to expect	Questions relevant, not repetitive, clear	
Openness & honesty, correcting misunderstandings	Not left feeling negative about participation	

Graham et al. (2007, p.6)

No bias was shown in the observation and the presentation of each pre-school method in the workshops. The same lend of emphasis was placed on each.

3.8 Limitations

The original design was to observe in one of each pre-school system however two Mainstream pre-schools were necessary from the start due to the division between private and community run. Two Montessori systems were also observed due to two St Nicolas accredited Montessori available in Co. Sligo. An additional Steiner Waldorf pre-school in Co. Clare was observed as the Co. Sligo pre-school are not as

established and needed cross referencing against the more established Co. Clare pre-school. However, the HighScope setting selected is acknowledged by HighScope Ireland and was deemed an accurate reflection of the setting. This research has been aware that acknowledging errors or limitations (through human nature) can help eliminate or reduce problems by taking appropriate measures. Questions which impact on the analysis of findings are: what limitations or influences have shaped these findings and what effects are to be noted? Furthermore, what are implications of these research findings for a comparative analysis? By constantly responding to these questions the route this research has taken to its conclusion has been determined at every stage.

3.9 Conclusion

The fundamental purpose of the methodology was to establish the most appropriate methods to inform the answering of the research questions (Johnson & Onwuegbuzie, 2004). The construction and design of this methodology proceeded thorough an exploration of different theoretical perspectives and methods used for data gathering and analysis, thus defining the criteria used to develop the analytical framework (Mac Naughton, Rolfe & Siraj-Blatchford, 2005). This methodology further applied radical looking, listening, reading and questioning throughout the use of the research methods, enabling the researcher to respond to any further information, not obtained by an employed method (Clough & Nutbrown, 2007). The philosophical belief which grounds this methodology is the Anti-Positivism Paradigm which gains an individual's view on social reality, accepting it as multi layered and understanding it through the accentuation of perceptions and explanation of phenomena.

The explorative investigation of method selection, utilized from the anti-positivism ethnomethodological school of thought employed the method of ethnography to support the qualitative paradigm. It delivered the qualitative aspects of data collection through participant observation and the interview guide approach. The questionnaires and the observation tool collected the quantitative data. Within the first phase of the primary research the method of radical enquiry highlighted the need for an additional observation tool which brought into play the social play continuum. The observation

tool offered both quantitative and qualitative findings. The Mixed Method approach for analysing data was implemented, due to the additional quantitative aspects needed to appropriately answer the research questions. The triangulation method offered a more inclusive way to analyse correlations between the research data to extend and expand the analysis and findings.

Through extensive exploration and understanding of methodology, this research has executed the optimum methods to answer the research questions. The employment of these methods has been justified, leading to the formulation and construction of interviews, questionnaires, observation, the art workshops and the observation tools for analysis. Radical enquiry has been used as a response to further methods considered necessary. A qualitative perspective and use of the mixed method approach has provided its philosophical groundings and has further extended the research's methodological offerings.

Chapter 4.
Findings Chapter

4.1 Introduction

The primary research findings have been informed through two action research phases which included observation in each pre-school during art time/class time and an art workshop programme which reconstructed the four pre-school's art methods. During these phases the recordings were observed through the pre-school art observation tool. The observation tool offered both quantitative and qualitative aspects to the recording of the art experience. The quantitative data were composed of instances of recorded behaviour that are explained in the literature review as evidence of development, while the qualitative data in conjunction with the secondary research provided context. The conclusions of findings were supported through the literature review, interviews and observation notes.

The main objective of the first phase of the primary research was to gather quantitative and qualitative information on the facilitation, the environment, the art exercise and the child's experience in each pre-school setting in order to aid the construction and design of art workshops. During the observation of this first phase it arose that the observation tool did not offer enough detail in the categories for speedy recording of multiple behaviours to fully depict creative thinking and development during an art experience. The social play continuum was therefore added to the observation tool. The new template was used during and after each art workshop and behaviours and language were noted using short hand. This first phase ran over twenty five weeks and used participant observation and short term observation. Since some pre-schools did not offer routinely structured art times this often meant sitting in the setting and waiting art activities to be initiated. The objective was to observe two

pre-schools representing each of the four early childhood care and education practices over four separate sessions in sessions of approximately one hour each. Though its object was partially to gather data for later comparison with theory, it was not at this stage to compare the pre-schools or their methods under any of the latter categories. In that objective the data for comparison collected in this phase will be added to the data from the art workshops observation phase which was of a longer duration in order to refine the view of the practice of each pre-school for analysis. The observation phases concluded in each pre-school with qualitative interviews carried out with all pre-school staff and followed a few weeks later with quantitative questionnaires for the same staff. The overall objective therefore was to record the environment, the facilitation, the child's experience and some elements of the relationship between each of the pre-schools theory and practice during art time, to instantiate in practice the knowledge gained in the literature review and thus gain perspective and context for the later stages of the research.

The art workshops were held in the physical room in a childcare centre. This second phase of the research consisted of six months of art workshops programmes which were broken down into six week art workshops based on the four pre-school systems art methods. There were 20 children which were divided into four groups of five named A, B, C, and D accordingly. The children started a workshop that used a certain preschool method, and rotated into another every six weeks. The children were studied under a standard set of conditions and received identical instructions in the same manner (Aubrey et al. 2000). The specific social factors in the classroom affecting the children were group size and age. Then each group was made up of a variant selection of age and gender. The overall design of the art workshops were based on the findings from the observation of preschool art time, interviews, questionnaires of the staff observed and the secondary literature, hence the construction involved both theory and practice.

4.1.1 The representation of data definitions in the findings

As the art workshops observation tool was used so often in the research, the language of this findings chapter in places uses the names of instances of behaviour as defined

in its construction to explain the findings. As explained previously in the section entitled "Questionnaire methods" chapter three the facilitation definitions used were as follows:

- Control - Child has no choice in access to, use, or organisation of time, space and materials. Both Process and Product are defined and exactingly and correctively facilitated.

- Direction - Child has some choice in access to, use, or organisation of time, space and materials. Process and Product are defined within bounds and facilitated with instructively.

- Guidance - Child has more choice in access to, use, or organisation of time, space and materials. Process is explorative. Facilitator enters into explorative aspect with child thus co-operates in determining the product.

- Empathy - The facilitator is reacting to the child's self guided activity.

The terminology for the movements and mode in which the child engaged through drawing and painting are defined as follows: rapid smearing, daubing, over painting, slow curving lines and objects (people or things). And the dialogue recorded through the observation tool was defined under the headings of: child to child, child to themselves (self-talk), child to adult and group discussion.

4.2 Findings from pre-school observation art time

4.2.1 Introduction

Before the start of each observation the presage variables were noted. This was necessary to establish if there were emotional or behavioural influences affecting the children's mood before they started the art experience (Matthews, 1999). The process variables and product variables were similarly recorded directly through the observation tool during each art experience.

4.2.2 The art experience environment

Within the defined categories of the observation tool the three different types of art experience offered by the preschools are group, individual and free art though some combinations of group and individual art were noted. Similarly the objective of the art exercise when controlled by the facilitation is either product based or has an educational function or both. During the observation phase there were various common environmental elements within the four pre-school systems. In each of the pre-school settings all the art experiences were performed in a general room using communal/shared space with a mixed age group. In line with the research questions these findings have concentrated on the differences between each environment.

4.2.2.1 Mainstream art practice.

The Children were left free to play and then called to sit down together and listen. They watched and listened solely to the adult who read a book or showed and thus explained what they were going to make. Music playing in the background was noted twice. Mainstream practice predominantly offers group art with a product base and an educational function. It does not offer free art. Theme development is also strongly supported from within the group activity. Within one of the Mainstream pre-schools observed there was provision for individual art work provided through a space in the corner of a room against the wall with two ready workstations supplied with paper and paints. These were used for an adult directed art experience which the children participated in once a week. With regard to the structure of the environment during group activity, one or two large shared tables were used. Some support was given to children who expressed individual ideas during this activity. There was a wall of shelves filled with books, craft items and art materials with just the lower shelves accessible to the children so to support their exploration and creative development (Bruce & Meggitt, 2005). The walls were covered with the children's group art and craft projects which were displayed to show the value of the children's work (Beaver et al, 1999). Against one wall were a small sofa and a television with a tape cassette beside it, and in another corner were a general play area with: sand box, dolls house

and a selection of toys, again to support their play and exploration (Beaver et al. 1999; Bruce & Meggitt, 2005).

4.2.2.2 Steiner Waldorf art practice

Before art time the children around sat around in a circle on chairs listening and talking to adult about a story, this is a daily activity. They were asked to go to their art chairs and all did quickly and quietly, sitting and waiting until everyone was ready and adult signalled them to begin. Steiner Waldorf practice offers individual art with an educational function though the objective remains spontaneous. It does not offer group or free art. The children all sat around a shared table which included individual prepared art areas containing their own art materials. The room used for art had a large rectangular table, like a kitchen table, with the chairs placed around to give enough room for each child to have their own art space. This environment was created to make it feel homelike for the children (Wood & Attfield, 2005). In the Steiner Waldorf pre-school it was pre-decided as to where each child would sit whereas in the Montessori pre-school the children were free to choose their own space from those supplied. The walls were painted in a light neutral tone with soft coloured net curtains around the windows in keeping with the interior of a Steiner Waldorf classroom (Iannaccone, 2001). On the walls were hand crafted objects and from the ceilings hung twigs displaying some crafts by the children and adults thus supporting the Steiner Waldorf aims and objectives for a creative environment (Rawson & Richter, 2000). In one corner were a nature table accessible to the children with elements from outdoors of; stones, plants, wax, shells and crafts and objects made from these to support the Steiner Waldorf approach of natural materials indoors (Wood & Attfield, 2005). The art materials were not accessible or necessarily visible to the children as they are placed away until next week's art experience.

4.2.2.3 Montessori art practice

Before art time the children were engaged in their individual activities and then called by the teacher to come together for group art work. The Montessori practice offers free and group art. The children are predominantly self-directed and individual art is therefore offered through the free art. Much of the objectives of art exercises were

educational function due to the didactic nature of the materials supplied such as tracing shapes and colour boxes. These activities would be taught to the children individually or collectively and then the children are left to resume their self directed activities. The structure of the environment supported these objectives of art exercises by offering individual space at shared tables and the materials were accessible on shelves around the room. Two other free art exercises were provided through the use of an easel and small rugs where the children could draw individually. These were provided by a ready access to pre-prepared paints and the provision of paper and colouring, thus offering more spontaneous art objectives. The easel was placed against a wall and the paper and colouring pencils on the shelves where again the children could use individual space at shared tables for drawing or individual rugs on the floor (Montessori Jr, 1997).Group art activities included group product based drawing or painting and the use of the artist folder, both with an educational function. The group product based art was structured through the environment through the use of shared tables in which the children were occasionally divided into smaller groups. The group use of the artist folder was placed around a shared table, again occasionally divided into smaller groups. Only the group product based art, artist folder and tracing were observed. The classroom had three tables in two rows with a few chairs at each dividing the room into certain areas of learning which supports the Montessori prepared classroom structure (Kahn, 1995). The surrounding walls in the prepared environment had low shelves with all didactic materials easily accessible and labelled which are key elements in the Montessori Method. On a small space on the wall there was some seasonal art and crafts displayed.

4.2.2.4 HighScope art practice

The environment settings before free art sees the children sitting around a table having a snack and are then asked what they would like to do from the choice of pre-selected activities. If the child chooses free art, the prepared accessible art environment has all materials at easy reach for the children, clearly marked with pictures and labels. In free art due to the provision of space the children were offered aspects of both individual and group art. Within group art the children sit together around a large shared table which is separate from the prepared art space being situated in the centre of the room. The children quietly wait for the adult to explain

the project. The objective of the each group art exercise is predominately product based and serves an educational function. Similar to the Mainstream practice, theme development is strongly supported through group art. The constructed room was partitioned into four sections with a prepared art space in one corner as recommended by the HighScope curriculum. In this area is a table with four chairs, an open unit with all painting, drawing materials and scissors, accessible and labelled. A chest of drawers beside this is labelled with the different types of paper available. The availability of the space and materials in the classroom is a core HighScope curriculum principle (Hohmann, & Weikart, 2002). All the walls in the room have art displayed with either group art or project work reflecting the theme or season of the month. There is a small wall area available beside the prepared art space where the children can put up their individual work which supports the HighScope curriculum by valuing the children's work (Vogel, 2001).

4.2.3 The adult's role as art facilitator

4.2.3.1 Mainstream art practice

As mentioned Mainstream do not offer free art and the practice of individual art is not emphasised. Mainstream group art started by discussion within the developing theme of the month during which the adult led with guidance. The adult had a pre-prepared product, usually a pre-cut shape or pre-made example, and took the children through step-by-step directive instructions. The adult moved around the group thus being aware of their abilities and helped those who required it, praised their work and displayed the art on the walls. The adult listened if a child had an individual idea and let them work it into their end product. During all of the observation, the facilitator never stepped out of the children's art spaces and was observed as being very hands-on in the course of each child's art work. Group art activities are provided on a daily a basis.

4.2.3.2 Steiner Waldorf art practice

Steiner Waldorf do not offer free play art and due to the arrangement of the seating group activity was limited to verbal exchanges during art. Art time was scheduled in

the routine though one period of drawing and one of painting on separate days repeated weekly. Thus space was by necessity facilitated with control. During individually art time the adult led with empathy and the only direction was at the start. The adult only spoke when spoken to and only communicated verbally to sing a rhyme when reminding the children how to clean the brush before moving to a new colour. Again, due to the provision of materials the adult had total control but no control as to what the children created. The adult was always observing the children even while they were engaged in a household activity. The adult sometimes sat down at their individual art area at the shared table and painted thus modelling art engagement.

4.2.3.3 Montessori art practice

During observation, as mentioned earlier no free art activity was noted. It was therefore deemed appropriate to record the adults facilitation in different activities that involved common facilitative objectives as follows: the facilitator initiated a new activity to the child through direction, encouraged if the child's work was good, corrected the child if in error, and did not speak to children engaged in their own activity unless spoken to so as not to break their concentration. The facilitator through observation was aware of what activity each child was engaged in and their level of ability. In group product based art the facilitator was directive to the group and held their attention while explaining the product step-by-step and offered some guidance when the child engaged them. In the Montessori practice the facilitation offered stresses the individual ability of the child with a view to the product during group art. Some art projects ran over two days with painting one day and cutting and creating the next. When the artist folder was employed by the facilitator the workstation and time was controlled by the facilitator. The facilitator was directive and empathic through discussion while controlling the focus of learning. There were no observed elements of Montessori art time which were routinely repeated.

4.2.3.4 HighScope

During free art the facilitator only spoke when spoken to. They were encouraging in tone when engaged thus leading with empathy. The time each child spent at a

workstation was semi-controlled, being limited by the period of time offered for free art but the children were allowed to finish when they wished. In group art the facilitator gained the children's attention and explained the project with direction through instructions. They then engaged in group discussion and investigation through guidance. The facilitator at times explained production step-by-step and showed some elements of control when showing the design of the finished product. The facilitator praised the children's work when shown to them in both free and group art and displayed it on the wall. The adult would facilitate due to ability of each child when technical skill was required. Both free and group art activities are offered as part of a daily routine in the HighScope practice.

4.2.4 The child's experience during art

Within the collection of art experiences observed there were frequently shared behaviours noted from the children of all the pre-schools. There was no recorded instance of a child not wanting to start an art experience. They all appeared happily engaged with the teacher and the art experience itself, and they all sustained attention within the activities which supported good social, emotional and cognitive behaviour. At the end of all art experiences the children had to tidy and clean up their space and materials.

4.2.4.1 Mainstream

The children all sat quietly and listened to the facilitator-to-child conversations at the start of group art, and waited patiently during the step-by-step instructions. The children were usually quiet when engaged in art making and mainly talked to the facilitator. Some child-to-child and group dialogue was noted regarding the materials they were sharing and a little group discussion was encouraged by the facilitator in order to talk about the theme around which the art they were producing. During the art experience the children looked for praise or guidance from the facilitator and sometimes asked if they could produce the art slightly differently than instructed which was supported. Painting and drawing movements varied through the art experience ranging from rapid smearing to daubing. The children were allowed to

move over to each other's space and look at each other's work during the art experiences.

4.2.4.2 Steiner Waldorf

While engaged in the art experience the children had the widest range of dialogue but the least with the facilitator. They all started drawing and painting at the same time and conversation started immediately between the group and child-to-child thus creating a noisier space without shouting. The main conversation content was centred on what new colours appeared while mixing occurred on their pages and what objects or shapes they could see or create. A few times a child asked their peers to copy them and each time the child said no. The children's paintings movements seem to be slow and controlled. They occasionally held their brushes just away from the page for a moment before starting to paint with a new colour, occasionally followed with rapid smearing. They finished at different times but. Once finished the facilitator writes the child's name on the picture and the child would move away and wait for the other children to finish. The child at this point cleans up their own art materials. No physical movement or interaction other than leaving the art activity was recorded.

4.2.4.3 Montessori

When a child self-initiated the tracing activity their only dialogue was to the facilitator. They would appear detached from the rest of the group due to the concentration involved in the activity, although at times they would stop, watch and listen to other conversations for a while before turning their attention back to tracing. When the smaller groups engaged in discussion through the artist folder while sitting around a table, the children were asked to express their feelings and emotions about the pictures and replied in front of the group, though most of the dialogue was directed by and to the facilitator. Of the two group product based activities observed in one instance the children sat till the activity ended whereas in the other the children were free to leave and initiate other activities. During group art time the children were all seated together, albeit in smaller groups and the facilitator directed them through the activity. Some amount of group discussion was noted during these activities but

this was not adult led. When each activity ended the child cleaned their materials and moved on to another activity.

4.2.4.4 HighScope

During free and group art the children were happily engaged and sustained attention in activity. Some differences in the children's movements were recorded during free art which were not observed in group art. Their actions were slower, more careful and purposeful while painting and drawing. During both objectives of art exercises the children would use each other's space by leaning over and physically engaging in the same art work. One instance of quarrelling over materials was noted. The children appeared confident and comfortable in holding their art up to discuss and show to peers before being put on the walls. Some children were influenced by what others were creating during free art while in group art a few instances of children choosing different colours than the rest of the group through support of the facilitator were noted. Dialogue during free art was mainly child-to-child with group discussion and some instances of self talk. Within a group art experience the dialogue started with adult-to-child then progressed into child-to-child and group discussion with the facilitator engaging in the discussion with the children. During free art the children were allowed to freely express themselves as the facilitator stepped out of the art space. In free art the children were allowed to exit the art space when finished but in group projects the facilitator attempted to hold the group together until the end.

4.2.5 Learning through art

Within all the pre-schools, tidying up was part of the art experience thus encouraging the children to care for art media and treating theirs and others art with care and respect. Reflection of the child's own art process was encouraged be it through wall display or putting away in personal folders. Some elements of each art experience worked in part on helping the child build on previous information and skill development. Steiner Waldorf, Mainstream and HighScope supported in varying degrees the children's engagement in discovery and investigation and sporadically used nature as a provider for media and inspiration. HighScope and Steiner Waldorf children used creative thinking to give form to expression and helped the children to

understand art as a way to express thoughts and ideas. Montessori and Steiner Waldorf encourage children to notice details in their art and the art of others. Mainstream and Steiner Waldorf children occasionally developed the use of their senses thus enabling developing skills for the extracting of information from their environment. While the HighScope and Mainstream children handled a wide selection of materials with dexterity.

4.2.5.1 Mainstream

Mainstream children were once observed to be separated due to ability. They were all consistently developing new skills while building on previously learnt techniques thus developing dexterity within a range of two and three dimensional media. The reading of a book and discussion of theme of the month during group art time helped the children make connections in learning, engaged them to make sounds for sensory learning, and developed some peer discussion and task persistence. The facilitator led the children through some discovery and investigation which developed cognitive skills.

4.2.5.2 Steiner Waldorf

Steiner Waldorf children used their art materials with reverence and great care during mixing, tidying up and displayed respect for other children's art works through group discussion. In the Steiner Waldorf practice, the objective of art exercise led to an educational function when painting which taught the children to control water colours while developing through play/spontaneous art. During the whole art experience children engaged in exploration and experimentation to express and communicate their creative ideas with their peers by looking and discussing theirs and others pictures. Through provision of their page the children were allowed to make their own decisions as to what to create while being imaginative with the self-expression of creative ideas. They developed and decoded simple symbols through discussion with their peers and occasionally with the facilitator. Some children seemed to be expressing emotion through their use of colours and construction and discussed this with their peers.

4.2.5.3 Montessori

While the Montessori children were tracing, they exercised perceptual discrimination, developed dexterity, built on previously learnt skills, noticed details and developed task persistence. They were reflective of their previous work as they looked through personal folders before starting. No child discussed their work with their peers during tracing, each seemed socially detached and only engaged verbally with the facilitator. During group-art-time they engaged in some discovery and investigation and a little group discussion while building on previously learnt skills. During the artist folder activity the dialogue was mainly adult to child and the children would see similarities and differences in objects and works of art thus noticing details.

4.2.5.4 HighScope

During free art, the HighScope children got to choose any materials available thus making their own decisions. They were inventive and imaginative with the materials lending them to be flexible and original with their ideas. They used exploration and experimentation to express and communicate their creative ideas with their peers while developing dexterity through two and three dimensional media. There were two recorded instances during free art time when a few children took the lead in developing a theme. Art became play-like when they practiced pouring paints and water while sharing stories of what they were creating with their peers. The facilitator during group art time helped the children make connections in learning and understanding nature for inspiration through theme exploration using books, colours and shapes thus aiding perceptual and cognitive development. The facilitator encouraged discovery and investigation through the art experience by allowing the children to move and develop group dialogue, thus aiding sensory development, peer interaction and task persistence. The children seemed reflective in conversation and would stand and watch while art was being displayed or quietly put work in their folder.

4.2.6 Findings from the pre-school interviews and questionnaires

The quantitative and qualitative questions contained in the interviews and questionnaires allowed the gathering of insights by talking to and gleaning answers from childcare workers from a large range of backgrounds and approaches, who had diverse qualifications and terms of service, both within their pre-school and in childcare in general, and philosophical groundings due to the pre-school areas they worked in. The content of the interviews also informed the development of the questionnaires by highlighting the areas that were seen as judgemental or invasive and thus allowing them to be put in a less direct way. Another purpose of the interviews was to further inform the findings from the observation of pre-school art time. As these were held in a somewhat restricted time frame it was considered that the research would benefit from the inclusion of further insights from the facilitators involved. Lastly the interviews were used together with the questionnaires, the findings from the preschool observation and the secondary research in order to assist in the construction of the art workshops.

As mentioned, the questionnaires were primarily used to develop a more complete view of the information gleaned from the interviews. They were initially meant to be the quantitative side of a two-sided approach that would help to answer questions of a more personal nature which may have been interpreted as judgemental to the subjects. While all of these objectives were fulfilled in the research, the quantitative analysis gave immediate information in the following areas:

It was noted that the plethora of training and qualifications from the various government bodies and private institutions, ranging from University education to 1 day courses and coming from a variety of different ethical and philosophical standpoints made it difficult to evaluate the training and educational record of individuals or compare experience from person to person.

It was clear that by enlarge, the participants answered the questions in accordance with their theoretical background in the sense that they knew what the 'right' answers were. But when compared with the actual observation of preschool art practice this

served to underline the gulf between theory and practice and the limitations of any purely interrogative approach.

4.2.7 Conclusion

As the focus of this research was on the impact of each pre-schools art, it concentrated on the aspects of the various pre-school practices that are individual, disputed or omitted. Since all of the pre-schools observed had the mutual goal of fostering creativity it is not surprising that the observation recorded many shared aspects between them in the areas of art environment, objective of art exercise, and provision of space. It is however interesting to point out some of the more relevant shared aspects. One environmental aspect of this was that all pre-school settings performed their art experiences in a general room using communal/ shared space with mixed age groups with its associated facilitative challenges. A further shared facilitation aspect recorded was that all the pre-schools encouraged tidying up as part of the art experience and supported reflection of the child's own art process through wall displays or use of personal folders. There were no recorded instances of a child not wanting to start an art experience and similarly they all appeared happily engaged with the teacher, the art experience and sustained attention within the art experiences. HighScope and Montessori employed no control in the free art spaces they provided. Montessori, Mainstream and HighScope were directive using guidance in the group art with HighScope using more guidance than the other two. The Steiner Waldorf adult would only speak when spoken to and would correct usage through song. During free art time Montessori and HighScope used empathy and gave no directive orders.

The majority of the art experiences supported an educational function and had a product based finish. In the Steiner Waldorf practice, through consistent routine in the objective of the art exercise, provision is made for each child to do spontaneous art. Similarly HighScope practice routinely offers spontaneous art through free art. Mainstream and Montessori practice do not offer spontaneous art as part of a routine. In the HighScope practice, provision within free art for exploration through the inventive, creative and communicative use of a wide range of materials meant that

they were the only preschool to offer this degree of exploratory use. In free art the HighScope and Montessori environments share similar provision of art materials which were easily accessible for children and were ready to use within a communal space. However the Montessori materials were didactic in function and in practice were not offered as part of a routine.

Of the two art experiences within Steiner Waldorf there was no variation in the time or day the art experience happened, no change of adult interaction and no change of provision of types of materials. Also, within Steiner Waldorf the children used their art materials with more reverence than noted by children in other pre-schools and developed and decoded simple symbols. Mainstream was the only preschool method that separated the children in accordance to their ages due to the focus on technical skill. Within the one instance of adult directed 'spontaneous' art the facilitator seemed to struggle with the idea of spontaneity and had reduced this area of the curriculum to short slots for each child in succession. This was not seen as keenly supported or as significant as group art to the Mainstream art system in practice. Significant noted behaviours during the HighScope art experiences were: The children would step into and use each other's art space in both free and group art, while in free art children would take the lead and develop their own theme for their peers. Neither of these behaviours were recorded in the other pre-schools.

In the Mainstream and HighScope practices peer interaction was both physical and verbal. The Steiner Waldorf practice showed mostly verbal with little physical interaction due to the restrictions of the seating. The Montessori practice showed some group interaction however, the children's interaction was substantially lower than the other preschools during art practice. The majority of dialogue within Montessori and Mainstream was child to adult. While in HighScope and Steiner Waldorf there was a varied direction of dialogue from: child to child, self talk, group discussion and some child to adult. Each pre-school art experiences encouraged a wide range of movement in the art process: rapid smearing, daubing, slow curving lines and faces.

These findings were used in conjunction with those of the interviews and questionnaires along with the theoretical criteria developed out of the literature review in order to construct the art workshop action research phase in all its elements. They They were similarly used alongside the findings from the art Workshops to draw conclusions for the analysis in chapter five.

4.3 Findings from art workshop action research phase

4.3.1 Introduction

For the data collection within the art workshops the children were studied in a standard set of conditions and received identical instructions in the same manner, as much as was possible (Aubrey et al. 2000). The art content of each pre-school programme was the same for each group, so all the children got to experience the same environmental layout and constructed pre-school method. Twenty children used within this research were placed into four groups, A, B, C and D. Each group was made up of a variant selection of age and gender. The specific social factors in the classroom affecting the children were group size and age. The art workshop format rotated every 6 weeks with each group then moving into a different art methodology and staying there for the following 6 week art workshops. The art workshops were held in the physical room within a HighScope Childcare Centre. During the construction of this phase emphasis was necessarily placed on all the recordings from the observation phase, and the interviews and the questionnaires provided much additional information. The intention was always for the environment once constructed to remain static in order to concentrate on the facilitation, learning through art and the child's experience during art. That said, during free art time within the HighScope art workshops the children went into their own classroom and used the prepared art environment. However due to the fact that the research was already using the children's school and the disruption caused by changing the children's routine would have skewed the results more than the alternative.

The observation tool was employed again. As mentioned in the introduction, the social play continuum was incorporated into the observation tool for this phase of the research. It also allowed data to be gathered on how the facilitation techniques support the development of children through the social domains in their pre-school art time. In this instance, the researcher played the role of the facilitator, thus giving a multiple perspective to support the findings. As the tool records quantitative and qualitative data, what follows is the qualitative data focusing on the interactions and dynamics between adult child and art. The quantitative findings from the observation tool are outlined and detailed in sections 4.4.3 to 4.4.4.

4.3.2 Qualitative findings of the art workshop action research phase

4.3.2.1 The adult's role as art facilitator

With reference to the observation research findings the shared aspects of the environment and facilitator's role through the control of materials and time were the same as those for the pre-school observation. As mentioned in the introduction of this chapter, the art workshops observation was of a longer duration than the preschool observation in order to refine the view of the practice of each pre-school for analysis. Since the qualitative findings from the first phase were used to inform the design, construction and actuation of the workshops in the second phase, the following can be seen as a more detailed extension of the original qualitative findings in phase one.

4.3.2.1.1 Mainstream art practice

Free art is not provided in Mainstream. Though one instance of individual art was noted in the preschool observation phase the duration for each child was extremely limited and this activity was practiced once a week. For this reason it was judged by the research to be superfluous to its purpose in the construction design of this second phase. Mainstream was led with some empathy, interactive direction and guidance throughout the group art exercises. The facilitator's tone was friendly but firm. The facilitator instructed the children as to what they would be making by using pre-cut materials and guiding them through the process. Materials were chosen by the

facilitator and offered in large shared cups around the shared table. The facilitator worked together with the children giving them freedom to choose what colours they wanted to use and verbally rewarding their work. The facilitator predominately developed a theme through engaging in conversation with the children. The facilitation was directive through technical skill development as the children were taught to listen, ask questions, learn and be reflective. The younger children were given more time by the facilitator to directly help them with technical skill development during which the older children were encouraged to watch and learn. The objective of the exercise was group art while allowing elements of individuality within an educational content and a product finish. The facilitation method was found to be leading the children through the social domain.

4.3.2.1.2 Steiner Waldorf art practice

All art activity in Steiner Waldorf is based around a shared/communal table with its individual and group aspects. Free art was therefore not provided. Steiner Waldorf was led with empathy and observation throughout the facilitative styles of either removing themselves from the children's direct art space or sitting quietly at an individual art area within the shared table. The facilitator would only speak when spoken to while teaching through example to all the children at the same time. The facilitator led all children through the correct technical skills required by occasionally singing to remind them to clean their brushes but otherwise let the children paint with no direction as long as they used the materials and cleaned up correctly. The art areas were placed around a shared table with individual art materials to produce spontaneous art. The facilitator and children had discussions around the nature table before the drawing or painting, reflecting on nature and colour. During the art experience the children moved from the associative to social and then to higher social domain.

4.3.2.1.3 Montessori art practice

Free and individual art were not observed in the Montessori practice. The Montessori group art was directive with both elements of control and guidance. The tone was firm and encouraging (like a school classroom). When using the colour grading game or

colour tablets all the children were taught first by adult on how to do an activity and then the younger ones were encouraged to watch and learn from the older ones to develop skill. The facilitator was directive and guiding through activities and learning and teaches them good practice. The group art was provided at a shared table with individual products to paint or create and the art experience offered an educational content and product finish. The facilitator would step back and observe while moving into the group and interacting with the children to help when required. The easel was used by all the children and it was positioned in a corner of the room with no adult interaction as it was a self directed activity which gave the children the space to connect encounters with art to their own art making experience. This was noted after the children had discussed the artist folder and then used the easel with comments to the facilitator as to which artist style they were painting in. The tracing materials were provided on a long table with their personal folders beside it using the provision nearby of a communal table to trace. This develops ideas and conversations around colours, textures, history and their emotions resulting from the pictures.

4.3.2.1.4 HighScope art practice

Individual art was not provided within HighScope. The facilitation was directive with instructions, giving the children guidance within each group art experience and leaving them to work creatively within group art experiences. The group art content was predominately product based with an educational objective. The group art space was provided through a large shared table with the facilitator offering materials for the entire group to share and use. As mentioned the facilitation was directive at the start when leading group art but nonetheless provided some elements of freedom for self expression for the children. The facilitation was directed at the children from the social to higher social domain through teaching the children technical skills then allowing them to be creative with it. Given access to all materials of their choice during the free art time the children were observed developing their own theme, being inventive with art materials and taking the lead in their art project thus assisting them in the cooperative domain. During the free art time the facilitator was removed from the children's direct art space and led through observation and empathy. The exception to all of the above was the in-depth studio approach which was facilitated by developing a theme around perceptual associations between music and movement.

During this group based activity the facilitator moved the children from the table and encouraged them to make markings to interpret the music and sounds provided on paper attached the walls.

4.3.2.1.5 Conclusion of the adult's role as art facilitator

Art time in Steiner Waldorf is individual with verbal exchanges being the only group activity.

Steiner Waldorf materials were led with total control which was a unique to that pre-school, while in Mainstream, Montessori and HighScope the facilitator gave semi control within group art as children could chose from a wider range of shared materials. HighScope and Montessori offer free art where by definition there is no control of materials or workstation. Another individual aspect within Steiner Waldorf was the total control over the workstation while in group art Montessori, Mainstream and HighScope employed semi control. The Montessori practice of facilitation is singular in its use of the artist folder and its discussion. The Steiner Waldorf practice was the only practice that used facilitation through quiet example and occasionally joining the children by sitting and painting with them. HighScope pre-school was the only practice to introduce a complete change in method of facilitation from one art experience to another within a consistent routine. Mainstream was the only practice to facilitate by separation of the group due to age or abilities and direct hands on adult facilitation in each art experience solely focusing on technical skill development. Another individual aspect within Mainstream practice was that the facilitator did not step back or remove themselves completely during the art activities.

4.3.2.2 The child's experience during art

Occasionally all the children in the different pre-schools used the daubing movement and technique in painting. Over painting also was seen occasionally in all practices but Montessori. The colours used in all the preschools were bright and even when the children were mixing they were encouraged to keep them bright. No preschool used one single colour and all used two or more. Mainstream and HighScope practice have the widest range of colours in their paints and pencils. The cognitive behaviour of sustaining attention ranged high in all preschools with Montessori children

occasionally easily distracted when engaged in activities that involved sustained concentration such as the colour box. Child to child conversations were of equal instances between Mainstream, Montessori and Steiner Waldorf practice while in HighScope there was more than twice the amount recorded than the other preschools. Child to adult dialogue was lowest in Steiner Waldorf during the art experience while the most was in Mainstream and Montessori who recorded equal amounts of instances. Child to adult dialogue in HighScope was average in the comparability between the other preschools. Group conversations and discussions among the children were highest in Steiner Waldorf, followed by HighScope and Mainstream. Montessori had half the recorded instances of group discussions than the other preschools. Steiner Waldorf again has the highest rate of self talk recorded in the art experience followed significantly lower by HighScope and Montessori with equal recordings. Mainstream had the lowest recordings of self-talk.

4.3.2.2.1 Mainstream art practice

The children in Mainstream had a wide range of colours and materials to use during group art. The most recorded painting movements where daubing and rapid smearing with some objects being drawn in the pictures. Occasionally when smearing the paint they would choose to do this very slowly and carefully similar to when they are mixing paints to produce a particular colour. Sharing materials increased group dialogue while sharing space increased self talk. If the children were engaged in an individual aspect of the art work they would verbally detach from group and just quietly watch each other while in the more interactive group art experiences they would increase into more group conversation instances. When the group were engaged in an art experience they would predominately talk more to the facilitator through accessing materials or asking for help. The child to child or group discussions with their peers were noted to be about what they were creating. Smiling and laughter had a high instance rate when in group painting and when mixing colours the conversation would be concentrated about getting the colour right.

4.3.2.2.2 Steiner Waldorf art practice

Children in the Steiner Waldorf art workshops drew various shapes and objects but these were not defined and the symbols were decoded by the child. Steiner Waldorf art experiences produced most rapid smearing and slow curving objects from the children. Steiner Waldorf children were only introduced to two colours when painting but offered a range of six crayon colours when drawing. During these art experiences the children's movement could range from rapid to very slow. Some children would self talk while painting or drawing 'look my colours are changing' and it appeared as a way to inform the others of what they were doing and encourage them to look at the picture. When children stopped and looked at other paintings this would occasionally start a group discussion. When the children spoke to the facilitator during the art process it was only ever to ask the facilitator to look directly at their pictures or tell them that they were finished. The children occasionally appeared detached when they were concentrating on their picture and would ignore any group discussion. Though predominately a child would stop painting or drawing when another child started to talk about their picture and most of the group would then engage in discussing their pictures. A few instances were recorded when a child would ask another to paint the way they were and they would discuss the shape or colours changing but the other child did not appear influenced to change their own picture.

4.3.2.2.3 Montessori art practice

Montessori had the highest instances of shapes or objects appearing in the children's pictures due to tracing the geometrical shapes and a lot of straight lines were observed during this procedure. The influence of the artist's folder was seen occasionally coming through in their free art paintings at the easel as they would self talk or describe to the facilitator later. The group art offered some collective group conversation but was limited and predominately child to adult. Not much movement was recorded during the range of art experiences. During the activities the majority of conversation was adult and child. Even when a child helped another, very little if any conversation took place. When tracing they would detach verbally from the group and even if they stopped to watch or listen to another child they rarely joined in the conversation. The child to adult dialogue was mostly questioning, seeking access or

approval. The only quarrelling noted was when the children were selecting their colouring pencils. Group dialogue would develop from the artist folder group activity but again it was adult led. The facilitator would teach the children about each artist and the construction of their pictures and then engage the children to discuss the different styles they liked and thus reflect on the pictures.

4.3.2.2.4 HighScope art practice

The children in HighScope went through a wide range of art experiences. Within the in-depth studio approach the children's movements were varied and active when engaged in mark making and if shapes appeared they shared this with the group. During the group art or free art very few would draw or paint straight lines naturally unless directed by the facilitator to do so. Within the free art experience children would take more care in what they were producing with slower and more careful drawing or painting movements. The dialogue type would increase and change within group activities. During the in-depth studio approach they would share with the group what shapes or markings they had made. The facilitation was sporadically directive at times during this activity and this increased child to adult dialogue, the facilitator would then completely step out of the art space. Due to the nature of this activity more movement and interaction was recorded as the children responded to the music and sounds. When mixing colours, sharing materials and space the group art conversations would increase and make the production more a process for the children with some noted instances of quarrelling. Play noises would happen occasionally when they worked as a group. Furthermore during group art time the group discussion was about what they could create, laugher and smiling was recorded high in this art experience. The free art time would see older children self talk through commenting on their own actions to help younger children produce the same art.

4.3.2.2.5 The conclusion of the child's experience during art

Child to child conversations was highest in HighScope. Child to adult dialogue was lowest in Steiner Waldorf while their self talk and group discussions between the children were highest. The majority of dialogue in Mainstream and Montessori was child to adult for accessing materials or looking for help. The colours used in the

preschools were bright and when mixing the children were encouraged and seemed to want to keep them bright. Mainstream and HighScope offered the widest range of materials. All children in the preschool systems appear: happily engaged with teacher and art experience, sustaining attention with good emotional and cognitive behaviour. In Montessori it was noted a few times that the children seemed easily distracted while tracing or colour box learning. Mainstream, HighScope and Steiner Waldorf movements range from rapid smearing, daubing, slow curing lines and faces, with Steiner Waldorf recording the highest of these instances. Montessori has the most noted instances of straight lines and shapes due to the tracing. HighScope children will move comfortably into each other's space in both group and free art causing more discussion and some quarrelling; this space interaction was not noted in the other preschools. In the HighScope free art sessions the children seem to take more care in painting and drawing movements with numerous engagements with other children and a few instances of quarrelling leading to problem solving over materials.

Dialogue type will increase and change within the different HighScope art activities for example the sharing materials and space to mix colours increased group dialogue and further influenced a product based experience to become more a process art experience. Only in free art time was it noted that older children would comment on their actions in an engaging and comforting way to help the younger children produce the same art. In Montessori there is no dialogue noted between children while tracing, as they concentrated on the technical skill. Also during the children's use of the easel as they had their back to the group they detached from all conversation. When Montessori children discuss the artist folder or during group art they engage with group conversation group and happily discuss how they feel about certain pictures. In Mainstream they predominantly start an art experience with a pre-designed product but can approach it somewhat singularly which was supported by the facilitator. During a child taking a more individual approach some detachment from the group was noted while they displayed more concentration. When smearing the paints or mixing colours slow careful movements were noted at times by the Mainstream children so not to over paint. Sharing materials increased their group dialogue in the art experience while sharing space increased self talk. Steiner Waldorf children's movements seem to be slower and controlled as they will occasionally hold the brush

slightly away from page for a thoughtful moment before starting. This was not observed in any other preschool and seems to support and help them sustain more attention in the activity. When Steiner Waldorf children draw some shapes and objects they were more obscure and were defined by the child through dialogue to group. This would engage other children to stop, listen, look and then discuss each other's drawings although some children appeared detached and would concentrate only on their picture and not engage. There were no noted instances of quarrelling in Steiner Waldorf and some recordings of comforting and a large extent of child to child or group engagement.

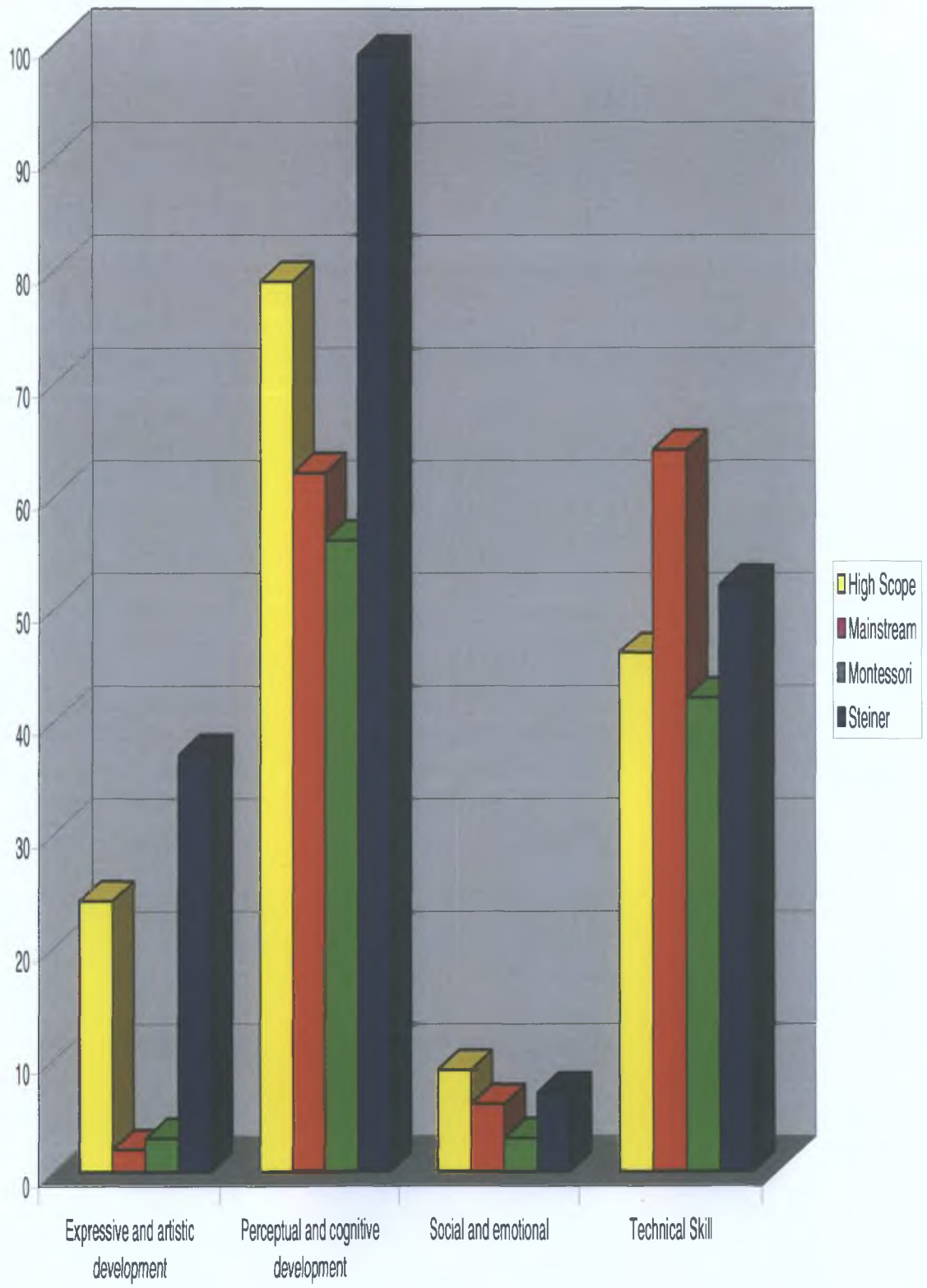
4.3.3 Quantitative findings from the art workshop action research phase

4.3.3.1 An overview of learning through art

The learning through art findings both identify each pre-school workshops overall learning outcomes and allow them to be compared. The elements which aid development are due to each preschools; chosen art experience, its process or production, adult's control or support and the direct or indirect influence in their constructed environments. These findings also illustrate what the children further learn and develop due to the dynamics of the group, initiation of self expression and interaction with the materials.

The Social play continuum was introduced to the observation tool during the research and as such has some overlapping of function with the tool as previously devised. The qualitative element of the original tool was divided into subcategories of observed behaviour within the categories of expressive and artistic, perceptual and cognitive, social and emotional, and technical skill. This section will therefore present the results from this part of the tool. The shortcomings of the social and emotional data can therefore be assessed by the reader themselves by comparing the findings to those of the social play continuum in later sections. The following then is a discussion of the findings:

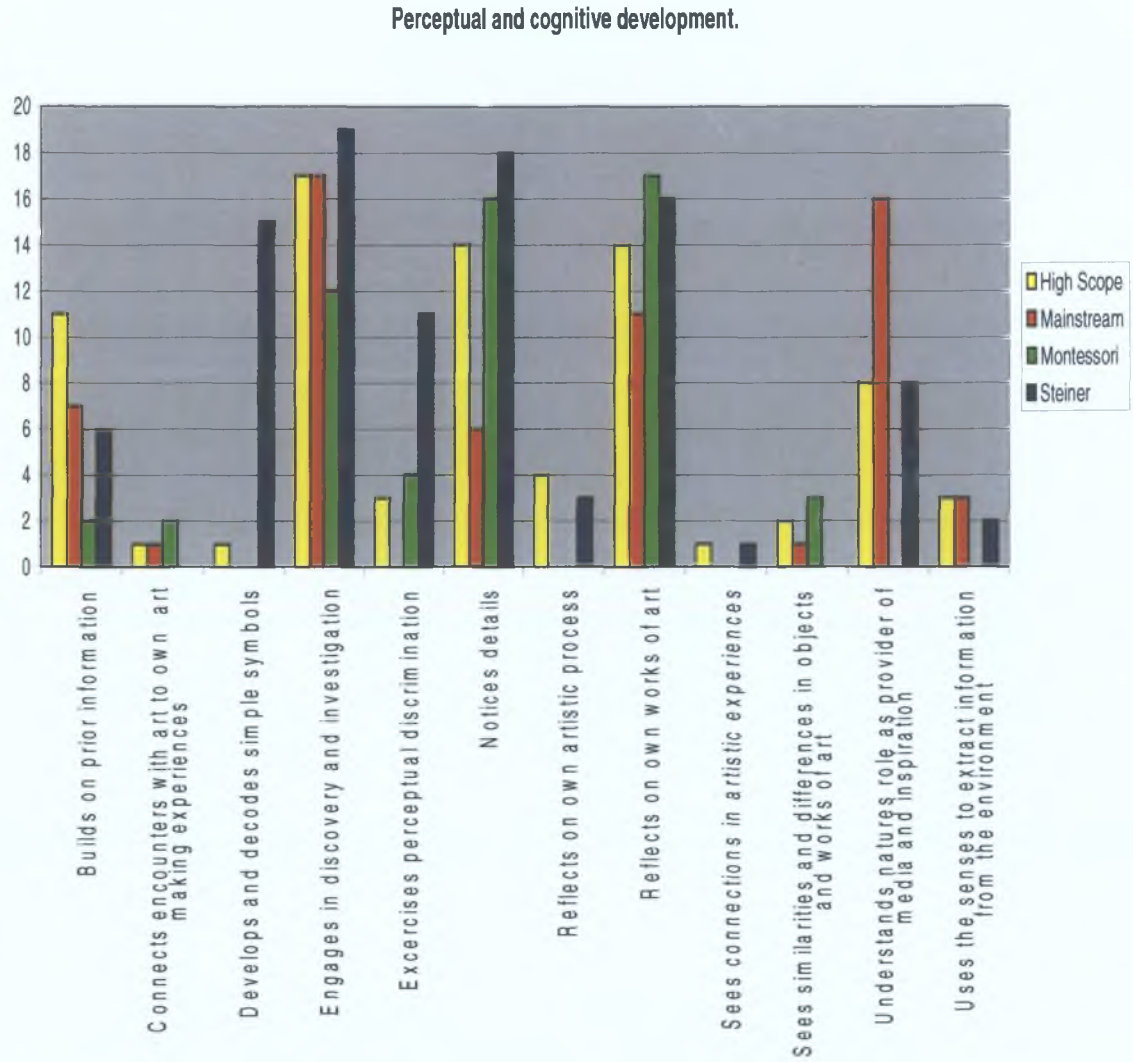
Figure 10. Graph of overview of learning through art.



4.3.3.2 Detailed findings of learning through art

4.3.3.2.1 Perceptual and cognitive development

Figure 11. Graph of perceptual and cognitive development.



The Mainstream workshop practice compared highest in representations of instances of behaviour under the sub-categories of 'Understands nature's role as provider of media and inspiration' and 'Uses senses to extract information from the environment', and have very high representation under the sub-category 'engages in discovery and investigation'. It showed average representation under 'builds on prior information' and 'connects encounters with art to own experiences' and low representations under 'Notices details', 'reflects on own works of art' and 'sees similarities and differences in objects and works of art' It was not represented under the sub-categories of

'develops and decodes simple symbols' 'exercises perceptual discrimination' 'reflects on own artistic process' and 'sees connections in artistic experiences'.

The Steiner Waldorf workshop practice was the only one that showed instances of behaviour recorded under 'develops and decodes symbols'. It showed the highest representations under "exercises perceptual discrimination' 'engages in discovery and investigation' and 'notices details' and second highest under 'reflects on own works of art'. The Steiner Waldorf workshop practice showed average instances of behaviour under 'builds on prior information' and 'sees connections in art experiences' though Montessori and Mainstream workshop practices were not represented under the latter. Neither were they represented under 'reflects on own artistic process where Steiner Waldorf workshop practice again showed well. Steiner Waldorf workshop practice showed average recordings under 'understands natures role as provider of media and inspiration' and were represented comparatively lower under 'uses the senses to extract information from the environment' It was not represented at all in 'sees similarities and differences in objects and works of art' and 'connects encounter with art to own art making experiences'

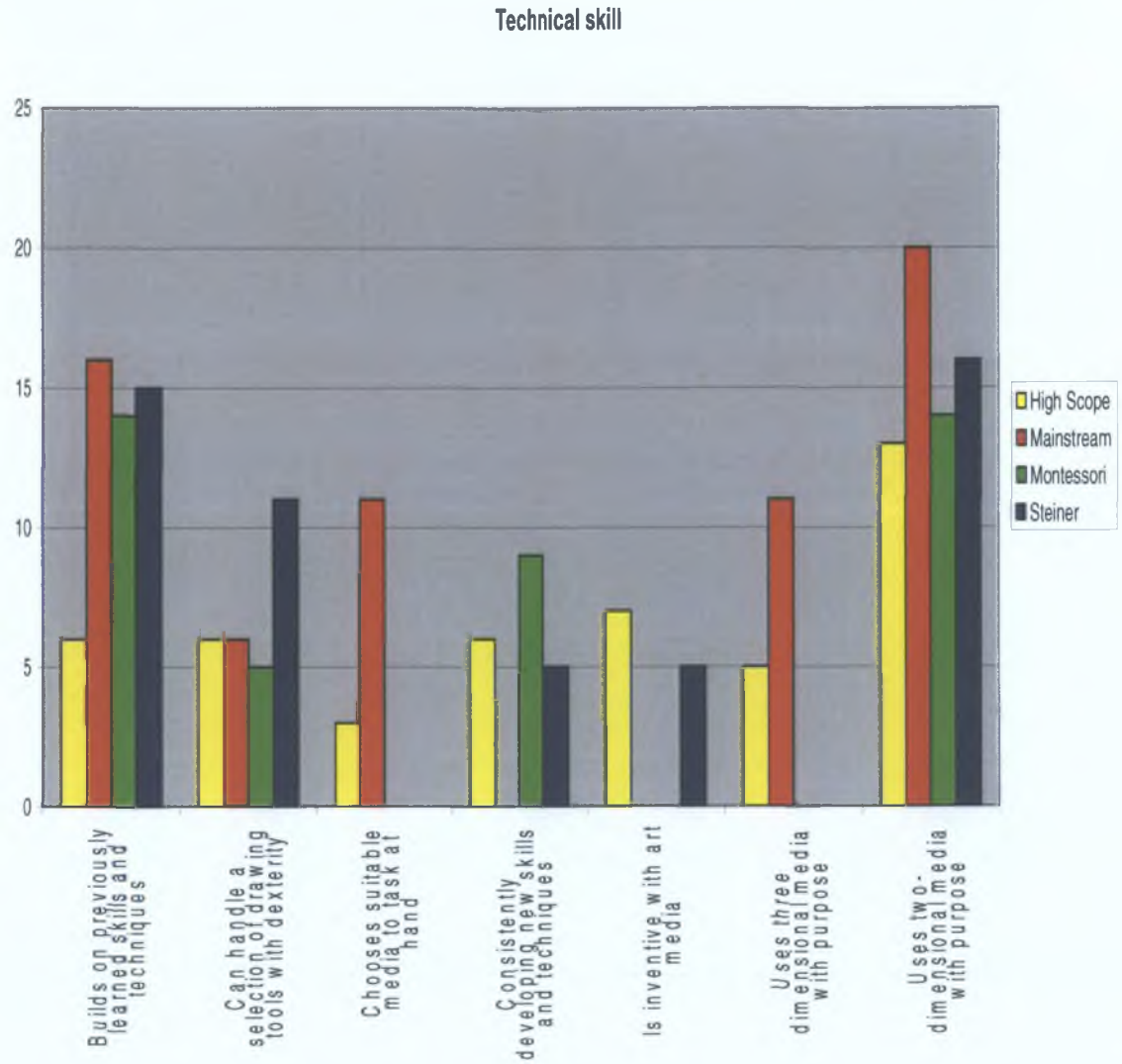
Montessori workshop practice showed highest instances of recordings under 'connects encounters with own art experience', 'reflects on own works of art' and 'sees similarities and differences in objects and works of art' and very high instances under 'notices details'
It showed average instances under 'exercises perceptual discrimination' and low instances under 'builds on prior information', 'engages in discovery and investigation'. It was not represented at all in 'develops and decodes symbols', 'reflects on own artistic process', 'sees connections in artistic experiences', 'understands natures role as provider of media and inspiration' and 'uses the senses to extract information from the environment'.

HighScope workshop practice was represented under every subcategory in the category of perceptual and cognitive. It showed the highest instances of behaviour under 'builds on prior information' and 'reflects on own artistic process' and shared highest with Mainstream workshop practice under 'uses the senses to extract

information from the environment'. It showed very high recordings under 'sees similarities and differences in objects and works of art' and engages in discovery and investigation', showing average recordings under 'connects encounters with own art making experiences', 'notices details', 'reflects on own works of art' and 'understands nature as a provider of media and inspiration'. HighScope workshop practice showed low instances of recorded behaviour under 'exercising perceptual discrimination' and 'develops and decodes symbols' where Steiner Waldorf workshop practice dominates.

4.3.3.2.2 Technical skill development

Figure 12. Graph of technical skill.



Mainstream workshop practice showed highest recordings of behaviours under 'builds on previously learned skills and techniques', 'chooses suitable media to task at hand', 'uses three dimensional media with a purpose' and 'uses two dimensional media with a purpose. This was seen as a result of the constant use of educational product based objectives which often use pre-cut materials within the practice. It showed average representations under 'can handle a selection of materials with dexterity'. It was not recorded in the more creative areas of behaviour such as 'consistently developing new skills' and 'is inventive with art media'

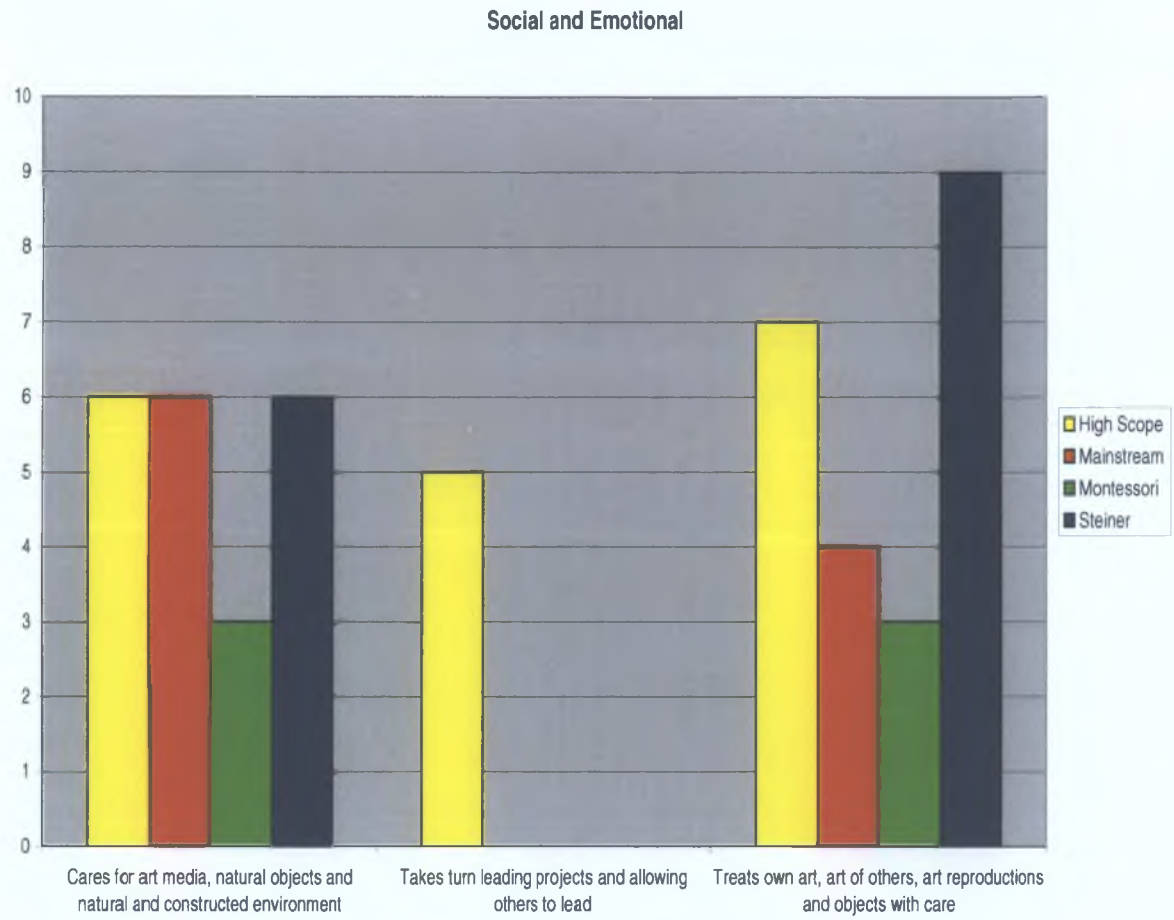
The Steiner Waldorf workshop practice showed comparatively high instances of recorded behaviour under 'uses two dimensional media with a purpose', 'builds on previously learned skills and techniques' and 'can handle a selection of tools with dexterity'. In line with the quantitative analysis no instances of children 'choosing suitable media to task at hand' were recorded as materials are controlled in the practice. Steiner Waldorf practice showed average recordings in 'consistently developing new skills and techniques' and 'is inventive with media' and had no recordings of instances under 'using three dimensional media with a purpose.

In keeping with the use of didactic materials and the technical emphasis in its facilitation, the Montessori workshop practice showed the highest recordings of instances under 'consistently developing new skills' and showed high instances of behaviour recorded under 'uses two dimensional media with a purpose' and 'builds on previously learned skills.' The practice showed average recordings under 'can handle a selection of drawing tools with dexterity' and was not represented under' chooses suitable material to task', 'is inventive with art media' and ' uses three dimensional media with a purpose'.

HighScope was the only workshop practice with behavioural instances recorded over all subcategories in the technical skill category. It had the highest instances recorded under 'being inventive with art media' and was above average under 'consistently developing new skills and techniques'. It showed average recordings of instances under 'can handle a selection of drawing tools with dexterity' and was comparatively lower in representations of ' building on previously learned skills and techniques' and 'chooses suitable materials to task at hand' this may be because a lot of their activities were group based. HighScope workshop practice was well represented in the area of 'uses three dimensional media with a purpose'; but showed lowest of the preschool practices in 'uses two dimensional media with a purpose'.

4.3.3.2.3 Social and emotional development

Figure 13. Graph of social and emotional.



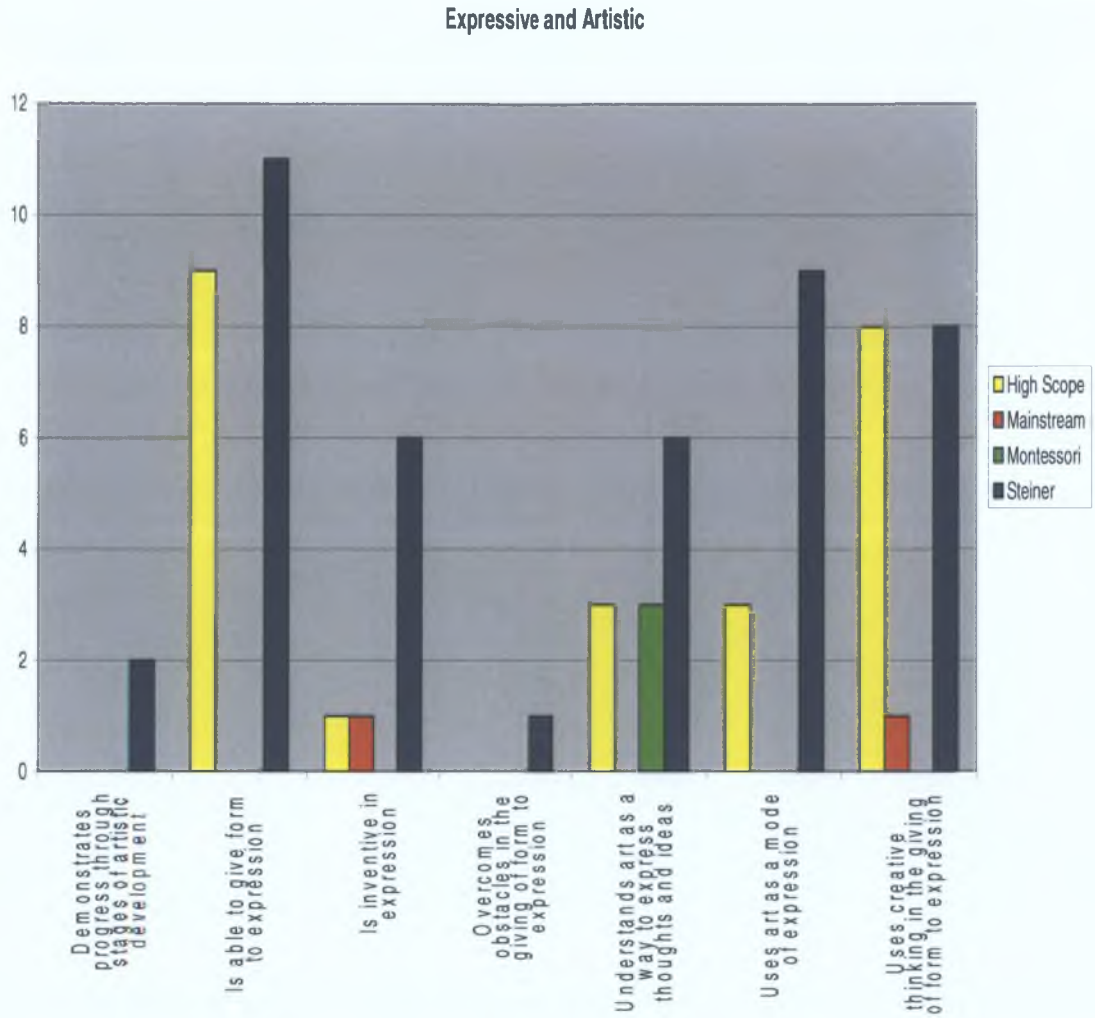
There were only three subcategories in the category of social and emotional as originally represented in the observation tool these were 'cares for art media, natural objects and natural and constructed environment', 'takes turns leading projects and allowing others to lead', and 'treats own art, art of, art reproductions and objects with care' .

Mainstream workshop practice showed average recordings of instances under 'cares for art media, natural objects and natural and constructed environment' and low recordings under 'treats own art, art of others, art reproductions and objects with care' The practice showed no recordings of 'takes turns leading projects and allowing others to lead'. Steiner Waldorf practice showed the highest representations under 'treats own art, art of others, art reproductions and objects with care' and compared averagely with the other practices in 'cares for art media, natural objects and natural

and constructed environment'. The Steiner Waldorf practice showed no recordings of 'takes turns leading projects and allowing others to lead'. The Montessori workshop practice showed the lowest recordings under 'cares for art media, natural objects and natural and constructed environment' and 'treats own art, art of others, art reproductions and objects with care'. It showed no recorded instances of 'takes turns leading projects and allowing others to lead'. HighScope workshop practice showed high recordings of instances across each subcategory. It was the only pre-school practice to show instances of 'takes turn leading and allowing others to lead'

4.3.3.2.4 Expressive and artistic development

Figure 14. Graph of expressive and artistic.



Mainstream workshop practice appeared twice in the category of expressive and artistic development, showing comparatively low instances recorded under 'is inventive in expression' and 'uses creative thinking in the giving of form to expression'.

The Steiner Waldorf workshop practice dominated in representations of instances of behaviour under this category showing instances in every sub category. They were the only pre-school to show recordings under 'demonstrates progress through stages of artistic development' and 'overcomes obstacles in the giving of form to expression' and showed highest recordings under 'is able to give form to expression',

'understands art as a way to express thoughts and ideas', 'uses art as a mode of expression' and 'uses creative thinking in the giving of form to expression'.

Montessori workshop practice was represented once in the expressive and artistic category where they compare averagely with the other pre-schools under 'understands art as a way to express thoughts and ideas'.

HighScope workshop practice shared highest instances of recorded behaviours with the Steiner Waldorf workshop practice in the sub-category of 'uses creative thinking in the giving of form to expression', showing high instances of recorded behaviours under 'uses creative thinking in the giving of form to expression' and 'uses art as a mode of expression'. They compared averagely with the other practices under 'understands art as a way to express thoughts and ideas'.

4.3.3.2.5 Learning through art conclusion

4.3.3.2.5.1 Perceptual and cognitive development

The highest recording of overall learning within the preschool art time was seen in perceptual and cognitive development through encouraging the children to engage in discovery and investigation and strongly supporting the children to reflect on their own art through wall displays or the use of their own folders. Within the Montessori workshop practice the reflection of previous work is part of the drawing procedure. Further to this during tracing children were noted to exercise perceptual discrimination. Steiner Waldorf workshop practice supported perceptual discrimination though group discussion and analysis of their self expressive art. All preschools provided occasions to help the children build on prior information and notice details. Comparatively, the Montessori and Steiner Waldorf workshop practices art time highly supported, the children noticing details in their pictures. The adult in the HighScope workshop practice teaches children to make connections when painting and will encourage the children's ownership of the picture, which develops their reflection on own their artistic process. In Mainstream workshop practice the reading of the book and discussion of colour of the month before art develops an understanding of nature as a provider of media and inspiration so helping making

connections in learning. The use of the senses to extract information from the environment was most developed in the HighScope workshop practice and in Mainstream workshop practice by movements within the art experience. The Steiner Waldorf art experience engages the children to look and discuss their pictures with their peers. This actively seemed to lead them to develop and decode simple symbols such as faces they see in theirs or other pictures.

4.3.3.2.5.2 Expressive and artistic development

HighScope and Steiner Waldorf workshop practices both offered space for the children to use creative thinking to explore through drawing and painting so using art as a way to express thoughts and ideas. In the Steiner Waldorf workshop practice children could use art as a mode of expression through their use of colours and construction of picture and so enabling them to give form to expression. Art became like a game during HighScope workshop practice free art through the children having their own choice of materials, how they used them and permission to create freely. This was seen to increases expressive and artistic development. HighScope workshop practice showed the only instances of 'children leading art projects and allowing others to lead' and this was only noted during free art time. High recordings of instances were noted in the areas of 'able to give form to expression' and 'using creative thinking to give form to expression' during the Steiner Waldorf and HighScope workshop practices with Mainstream and Montessori workshop practices showing low or nonexistent instances over all areas. The Steiner Waldorf workshop practice was represented strongly under all headings and notably had the only recorded instances under 'demonstrates progress through stages of artistic development'. The Steiner Waldorf workshop practice through its ethos of art gives the children the most opportunities to be creative on their page and the children seem to respond with creative thinking and giving form to expression. HighScope workshop practice free art time offered the children opportunities to be inventive with expression and use art to express their ideas. Children demonstrating progression through artistic development was only recorded in the Steiner Waldorf practice. Montessori, HighScope and Steiner Waldorf workshop practices noted instances as children 'understanding art as a way to express themselves through ideas'

4.3.3.2.5.3 Technical skill

HighScope and Steiner Waldorf were the only two workshop practices to be represented in the two more creative sub-categories of 'consistently developing new skills and techniques' and 'is inventive with art media' and both were well represented across this category.

Mainstream workshop practice showed no representation under these more creative sub-categories. This was in line with the qualitative findings since the practice used total control over provision and semi control of the use of materials in making pre-designed product based art within group activities. For the same reason the children in the workshop excelled in using two and three dimensional media with a purpose and choosing suitable media to task at hand. Montessori workshop practice was not represented at all in the sub-category of 'is inventive with art media'. Again this was in line with qualitative findings since the materials provided in this preschool system are didactic. The Steiner Waldorf workshop practice showed no representation in 'chooses suitable media to task at hand' and 'using three dimensional media with purpose' as they did not use three dimensional media in the art experience and the materials are chosen for the children in advance.

4.3.3.2.5.4 Social and emotional development

All preschool workshop practices encouraged children to treat their own art and that of others with care through the responsibility of putting their own work in folders, tidying up after the art experience and in some preschools displaying their art up on the walls. In the Steiner Waldorf workshop children used their art materials with reverence and great care during mixing and tiding up. In HighScope workshop practice free art time the full responsibility of using and cleaning up was placed on the children and they worked like a team in both aspects. HighScope were the only workshop practice to be represented under 'takes turns leading projects and allowing others to lead'. Montessori workshop practice was poorly represented under the sub-categories of 'Cares for art media, natural objects and natural and constructed environment' and 'treats own art, art of others, art reproductions and objects with care'.

All of the latter information will be used in the further triangulation of data that takes place in the analysis. It will be mainly used to substantiate the critique of each facilitative practice. The inclusion of findings from the social play continuum will make it possible to place these facilitative findings in the context of the each complete pre-school system as represented in the workshops. This will allow the representation of each across the social domains.

4.3.3.3 A qualitative finding of the social play continuum from the literature review

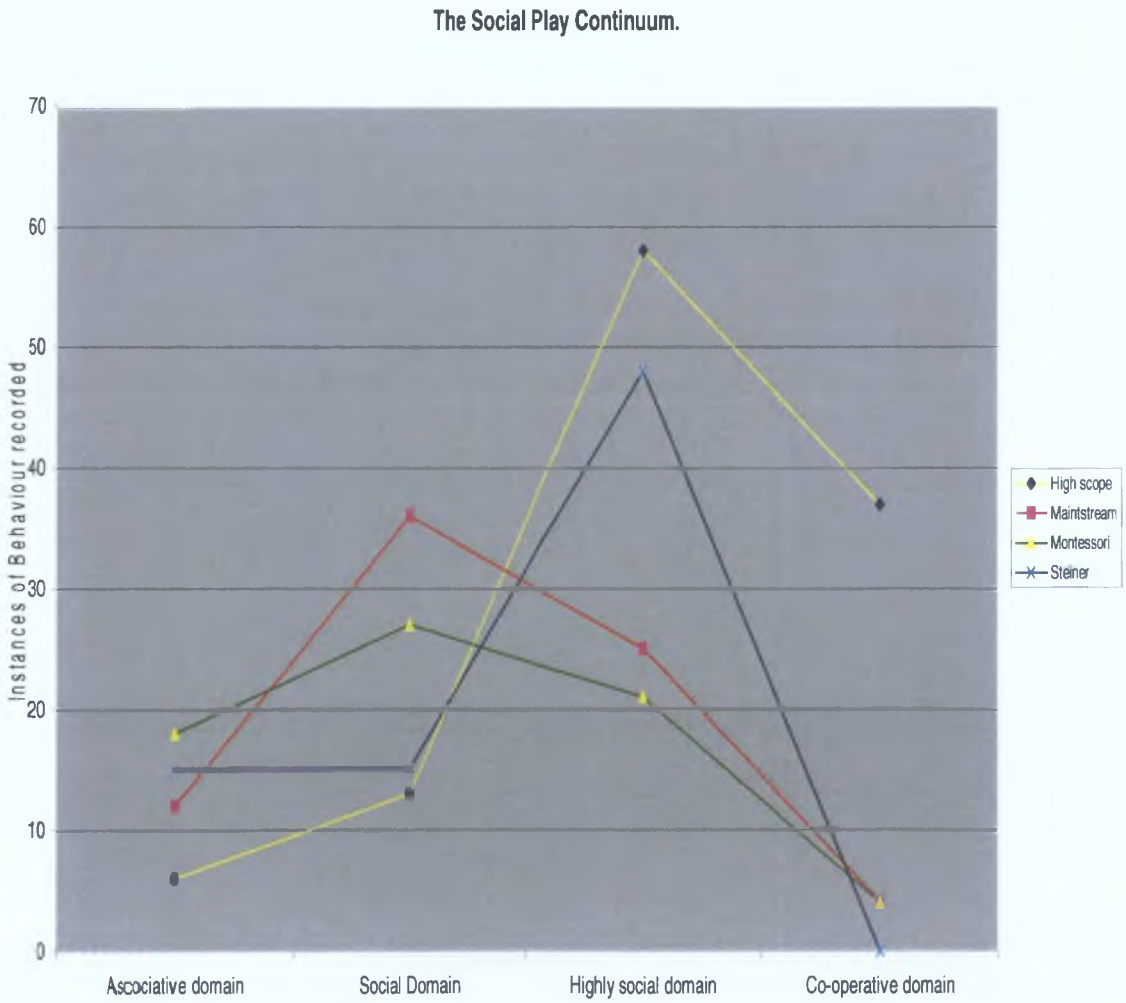
In pursuing the aims of the literature review the art-work of prehistoric peoples in the creative act was studied. The resurgence of the organic and geometric modes through history were noted to highlight the fundamental nature of very basic modes of creativity and representation in human development, and its link to the same basic modes in modern children through symbols. To fit the latter purposes these modes were dealt with in the literature review as they are typically recognised, in terms of the style they are expressed in, by examination of the product of artistic activity. However the *motivating influences* of these different styles were noted for possible further use in comparing with motivations of pre-school children. Read (1949) describes the organic style is viewed as produced by those who inhabited and evolved in a more manageable, temperate environment and climate. Those who used the geometric style lived and evolved in parts of the world where the conditions would have been more hazardous.

The literature review went on to study the processes involved in cognitive activity through symbol manipulation, the developmental and creative theorists, and through this the nature and importance of creative activity in the development of children but the question of motivation still remained to be addressed; However in studying the latter the importance of art as a representational activity to the development well being and future mental stability of children in the earliest stages of social engagement was noted, as was its importance as a unifying activity that allows children in the later stages of development access to associated learning skills by providing a theatre for experimentation with group dynamics, leadership, and other

highly socially interactive phenomena. The discovery and inclusion of the social play continuum in the research brought together these broad ranging ideas in a focused approach. It allowed the link to mans earliest art to the be explored in relation to children's creative development through the common elements of motivation as the organic motivation of early man could be seen to correlate to the innately motivated expressive needs of children in the lower domains. Similarly, geometric motivation could be seen to correlate with the external motivational of children in the later domains.

4.3.3.4 Creativity in the context of development through the social play continuum

Figure 15. Graph of social play continuum - overview.



The social play continuum was developed as a tool to record and represent the growing complexity of child interactivity and socialisation throughout their early development. The categories of the tool were designed to identify specific behaviours which indicate the relative social development of children. From within these categories, key areas of represented behaviour were identified in the methodology chapter which indicate creative development under the headings of: expressing and communicating, exploring and experimenting, using imagination, and responding to experiences. The tool can therefore be used for several purposes; primarily to identify the domains within which the children of each preschool system are interacting and quantify this interaction for comparison and analysis; and to note the occurrences of behaviour signifying skill development in the key areas mentioned. A third benefit of the social play continuum is that a closer look at the recordings of behaviour under each category, when triangulated with the data from the findings from the observation of the preschools by their quantity, inclusion or omission can signify the use of certain facilitative techniques and the impact of various aspects of the environment or objectives of exercises used. Thus the relationship of the workshop practices to areas of the children's social development can be identified.

The following is a comparative overview of the behavioural instances recorded from the observation of the children participating in each workshop representing the different pre-school systems, across all the domains within Social Play Continuum as represented in figure 15 below. This graph is further broken down by domain and explained in the succeeding pages. In using this information to identify domains within which the children of each preschool system are interacting, and quantify this interaction for comparison and analysis the following is apparent: The majority of instances of behaviour were recorded through the social and highly social domains with least recordings of behaviour in the associative and cooperative domain. HighScope is the only workshop practice in which the children engaged in substantial activity within the co-operative domain and has the highest representation of behaviours instanced in the highly social domain. This workshop practice compares lowest in the associative and social domains and highest in the highly social and co-operative domains. Similarly most behavioural instances in the associative domain are recorded in the Montessori workshop practice and the same can be said of

Mainstream workshop practice in the social domain. The Mainstream workshop practice compared second lowest in the recordings of behaviour instanced within the associative domain. It showed below average representation in the highly social domain. The Steiner Waldorf workshop practice showed above average recordings in the associative domain and below average recordings in the social domain. The Montessori workshop practice dominates the associative domain and shows above average recordings of behaviour in the social domain. However it shows below average representations in the highly social domain.

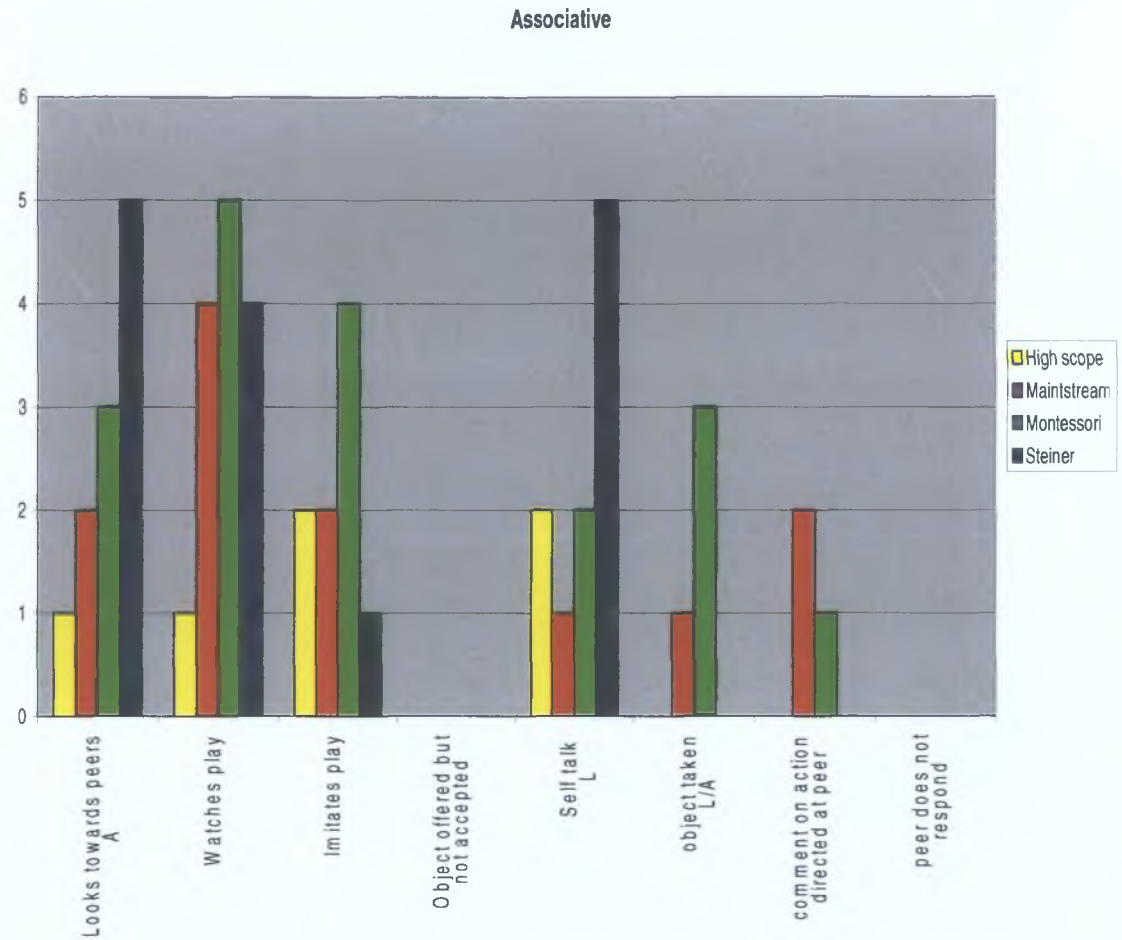
From the above it can be seen that children in differing domains will benefit from the workshops presentation of each differing pre-school system.

4.3.3.4.1 Detailed domain interaction during the art experiences

The social play continuum is categorised to record children at play. It is used here to record art time so categories of behavioural instances discussed here which refer to play should be seen in the context of the activity. The question of why each workshop practice shows different levels of representation from the others in each domain, as well as why they differ across the categories of each domain will be discussed here in relation to the findings from the observation of the preschools. In using the same group of children in each workshop practice, their differing recorded instances across each category will be shown to be the result of factors such as facilitation, environment and objectives of exercises used within the different workshop practices. Hence, when a category of behaviour shows high for one pre-school workshop practice, and low for another the difference must be attributed to such factors.

4.3.3.4.2 Associative domain

Figure 16. Graph of the associative domain.



The following descriptions make reference to the findings as represented in figure 16. Mainstream workshop practice was well represented in terms of its inclusion across each category of this domain; however it showed third highest in terms of overall recording of instances. From the latter it follows that though the children were not inhibited from areas of behaviour appropriate to this domain the practice as presented was not optimal for children in it. It showed highest representations of behavioural instances under 'comment on action directed towards peers' and high representations in 'watches play which is a key category of creative development identifying imagination. It showed average representations in 'looks towards peers' and 'imitates play', and low representation in 'self talk' and 'object taken'. Imitates play is also a key category identifying exploring and experimenting, imagination and responding to experiences. Self talk or verbalisation is a strong indicator of creativity

(Gardner, 1980) and a key category identified in the methodology as showing imaginative development, and this workshop practice was represented poorly in this category.

In contrast to the latter, the Steiner Waldorf workshop practice showed second highest representations in this domain but across a restricted range of categories; and similarly, this suggests the children *were* inhibited from some areas of behaviour appropriate to this domain while in other areas they were optimally provided for. The Steiner Waldorf workshop practice showed highest representations under 'looks toward peers' and 'self talk' and high representations under 'watches play'. The latter two are key categories of creative development identifying imagination. It showed low representation under 'imitates play' which again is a key category of creative development identifying exploring and experimenting, imagination and responding to experiences. It was not represented under 'comment on action directed at peer' or 'object taken. From the latter it is apparent that there were elements in this workshop practice as presented which prevented some of the more interactive behaviour between children in this domain. Another noteworthy point is that under 'self talk' this workshop practice showed as many representations of instances as all of the other pre-school workshop practices combined.

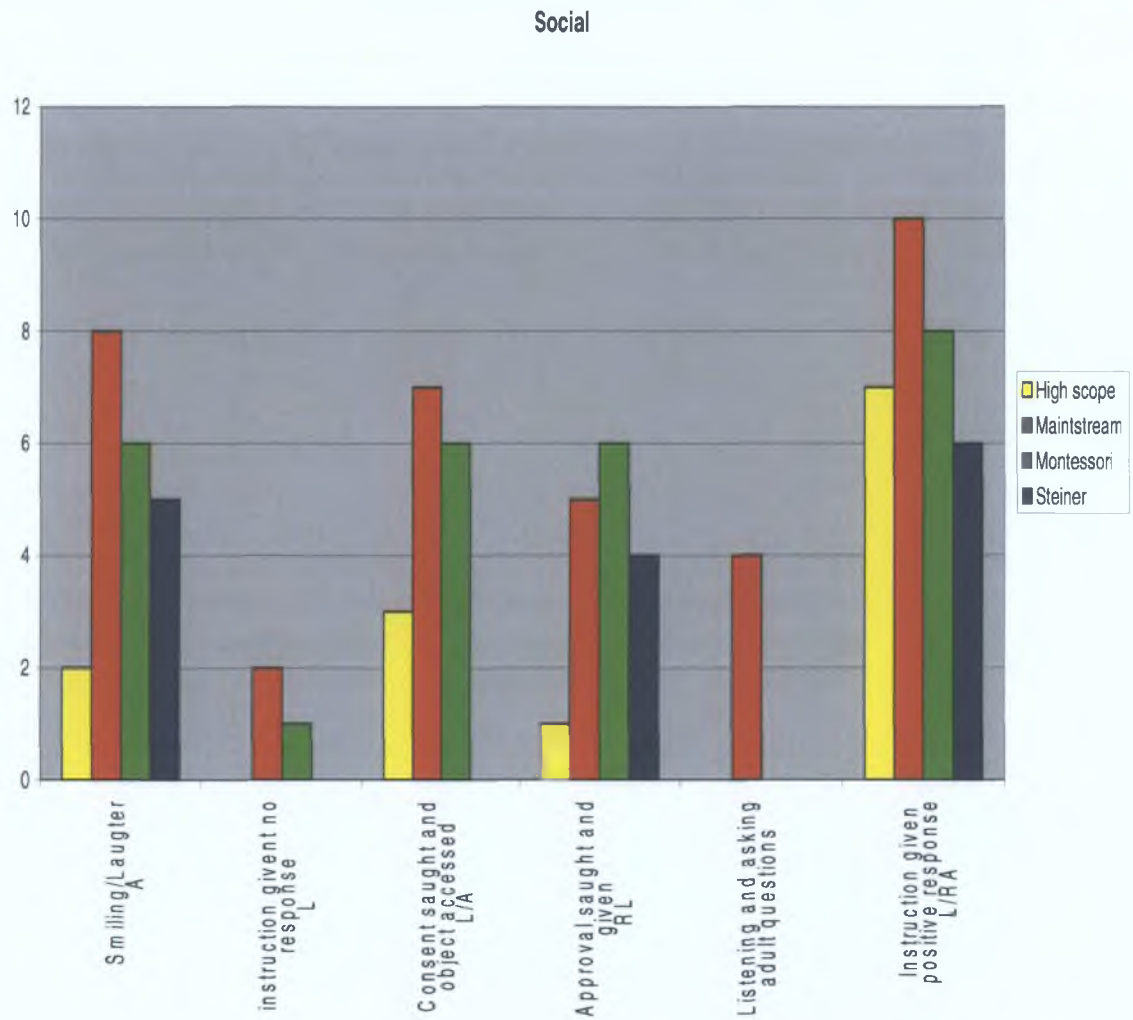
Montessori workshop practice dominated this domain in terms of representations of recorded behaviours instanced and was represented well under each of the categories where behaviours were instanced. It showed high representation under all categories and corresponding representation in the key categories of creative development except 'self talk' where it showed average representation and 'comment on action directed at peer' where it showed low representation. Despite the strong representation across the categories, self talk, an early indicator of creativity and imagination was comparatively average toward the other workshop practices.

The HighScope workshop practice was represented poorly across this domain both in total and across the categories. As before this shows the children were inhibited from areas of behaviour appropriate to this domain, and in the areas of behaviour where the children were *not* inhibited they were not optimally provided for. It showed low

representations under 'looks towards peers' and 'watches play', a key category of creativity instancing imagination. It showed average representations under 'imitates play' and 'self talk' which are key categories indicating imagination. In view of these results it would seem appropriate to say that according to the data, children were just not well provided for in this domain during the workshop practice.

4.3.3.4.3 Social domain

Figure 17. Graph of the social domain.



The following descriptions make reference to the findings as represented in figure 17. In this domain the categories largely reflect levels of interaction between facilitator and child so high levels of behaviour instanced correspond to similarly high levels of facilitative involvement in the art process and signify associated objectives

of exercise. 'Smiling and laughter' was included as a category to serve as an indicator of social interaction within this domain. It therefore should in no condition be understood as an assessment of the happiness or emotional state of the children in this part of the study.

The Mainstream workshop practice dominated this domain in terms of representations of recorded behaviours instanced and was represented well under each of the categories where behaviours were instanced. It showed comparatively high representation under all categories except 'approval sought and given' and corresponding representations in the key categories in this domain. It was the only workshop practice represented in listening and asking adult questions'. The high level of adult child interactions reflects the hands-on educative approach recorded in the observation of pre-schools.

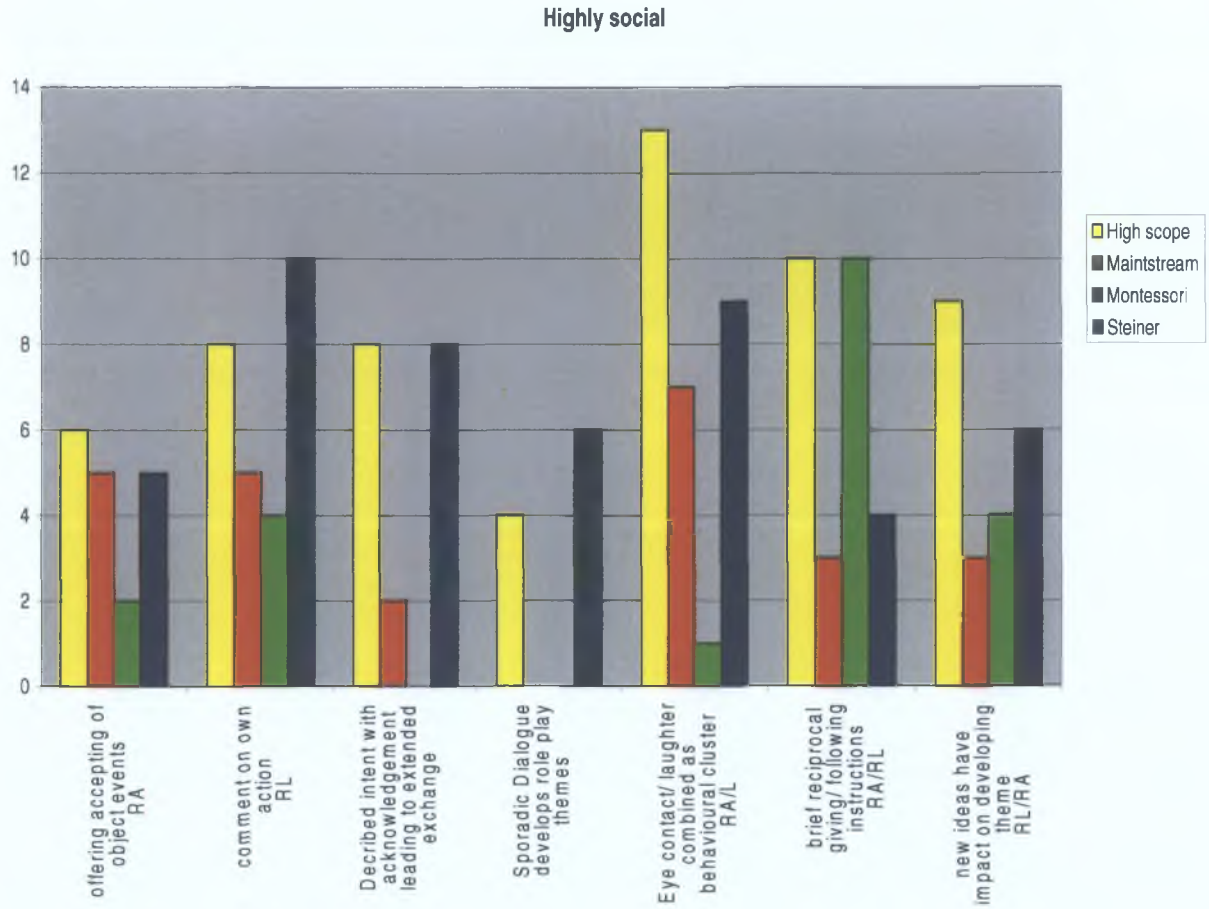
It is not surprising that the Steiner Waldorf workshop practice, which differed from Mainstreams greatly, was represented sporadically across this domain showing below average recordings under 'instruction given positive response', which is a key category indicating responding to experiences, and 'smiling laughter' and average recordings in 'approval sought and given'. They are not represented in the key categories of 'consent sought and object accessed' which is also a key category identifying exploring and experimenting and expressing and communicating.

The Montessori workshop practice, in similarity to Mainstream's showed high representations across this domain in terms of recorded behaviours instanced and was again represented well under each of the categories where behaviours were instanced. A similar educative approach was observed in this pre-school practice in phase one of the primary research, though with the emphasis on individual development. It was highly represented in the key categories of 'instruction given positive response and 'consent sought and object accessed' which indicate exploring and experimenting and expressing and communicating, and responding to experience accordingly. This Workshop practice also showed highest recordings of instances under 'approval sought and given, which was interpreted as reflecting the children's response to the didactic materials provided.

The HighScope workshop practice was poorly represented across this domain except for under the category of 'instruction given positive response', a key category indicating responding to experiences, where they compare averagely. The low representation across this domain was on one hand a positive feature for the creative development of the children in the sense that it indicated less facilitative intrusion into the art experience of the child and hence less formulation in the objective; However on the other hand it can be interpreted as behaviour appropriate to children in this domain being inhibited by these workshop practices. For this reason the social domain can be seen as positioned on the developmental boundary between the organically motivated children in the lower social domains and the geometrically motivated children in the higher domains.

4.3.3.4.4 Highly social domain

Figure 18. Graph of the highly social domain.



The following descriptions make reference to the findings as represented in figure 18. In the highly social domain the categories reflect more interaction from child to child. The children are in this sense more independent of the facilitation than they were in earlier domains.

The Mainstream workshop practice was decidedly average in its overall representation of behaviour in this domain, though its representation across the categories was good. From the latter it follows that though the children were not largely inhibited from areas of behaviour appropriate to this domain the practice as presented was not optimal for children in it. This workshop practice showed high representations of behaviour under 'offering accepting object events'- a key category indicating imagination , average representation under 'comment on own action' - another key category indicating expressing and communicating, and 'eye contact

laughter combined as behavioural cluster'. It showed lowest recordings under 'described intent with acknowledgement leading to extended exchange', 'brief reciprocal following instruction' and 'new ideas have impact on developing theme' which is a key category indicating expressing and communicating. No instances of 'sporadic dialogue develops role play themes' which is also a key category indicating imagination, were recorded which indicates that at least in this respect the children could not express themselves appropriately to their domain.

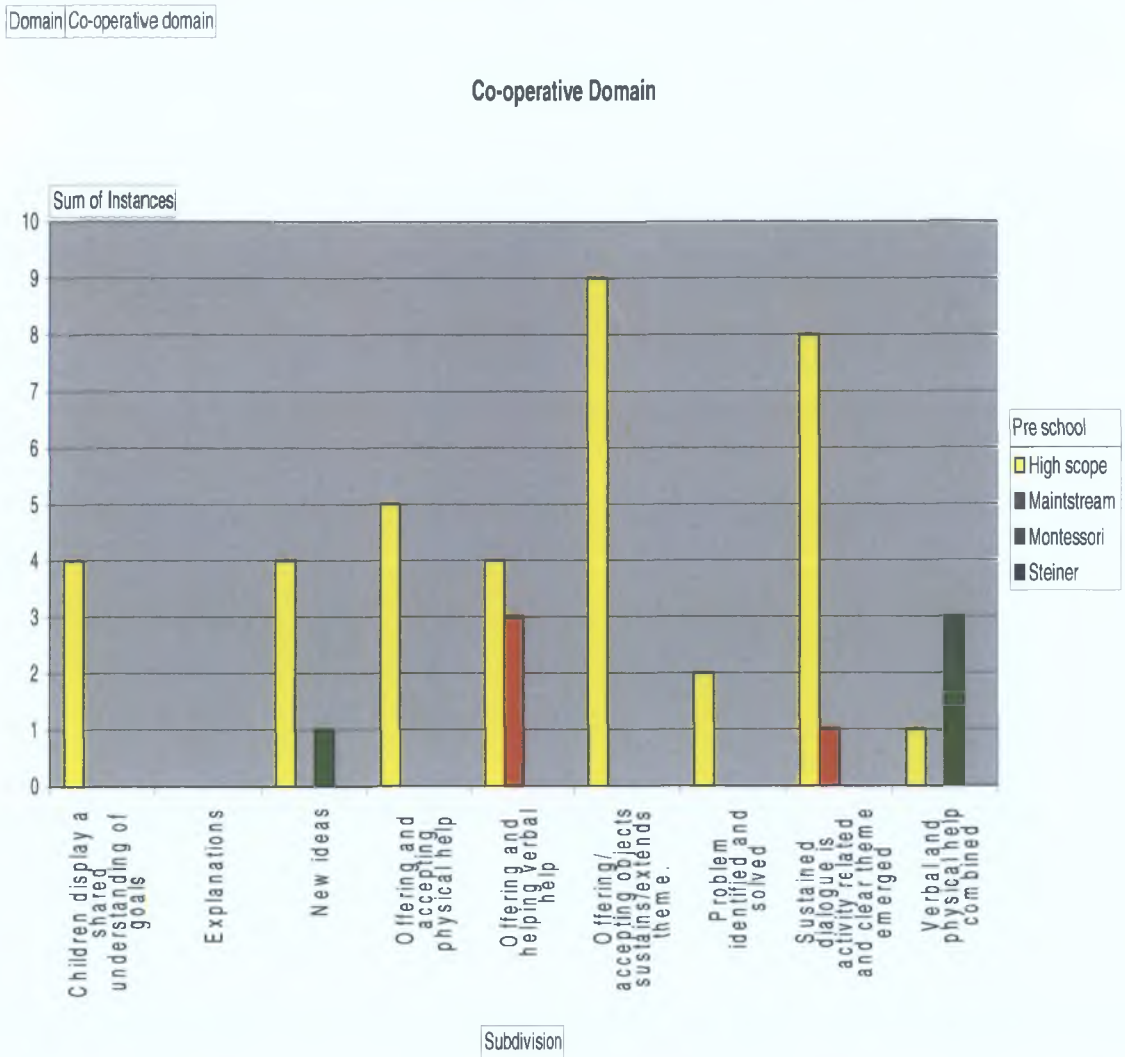
In contrast to this the Steiner Waldorf workshop practice is fully represented across this domain. It showed highest representations of action under 'comment on own action'- a key category indicating expressing and communicating, 'described intent with acknowledgement leading to extended exchange', and 'sporadic dialogue develops role play themes' which is also a key category indicating imagination. It showed high representations under 'eye contact laughter combined as behavioural cluster', 'offering accepting object events' which is a key category indicating imagination, 'new ideas have impact on developing theme' which indicate exploring and experimenting and expressing and communicating, and average representation under 'brief reciprocal following instruction'.

The Montessori workshop practice showed poorly both in its inclusion across the categories of this domain and in total instances noted. As before this shows the children were inhibited from areas of behaviour appropriate to this domain, and in the areas of behaviour where the children were not inhibited they were not always optimally provided for. It showed highest instances under 'brief reciprocal following instruction' and average recordings under 'new ideas have impact on developing theme' which is a key category indicating exploring and experimenting and expressing and communicating. It showed low recordings under 'offering accepting object events' and 'comment on own action'- both key categories indicating imagination and expressing and communicating accordingly. And similarly low recordings under 'eye contact laughter combined as behavioural cluster'. It was not represented under 'described intent with acknowledgement leading to extended exchange' and 'sporadic dialogue develops role play themes'.

The HighScope workshop practice dominates both across this domain and in total instances noted with comparative representation across the key categories. It compared highest under 'eye contact laughter combined as behavioural cluster', 'brief reciprocal following instruction', 'new ideas have impact on developing theme', 'described intent with acknowledgement leading to extended exchange' and 'offering accepting object events'. It showed high representation under 'comment on own action' and lowest under of 'sporadic dialogue develops role play themes' though Montessori and Mainstream workshop practices are not represented.

4.3.3.4.5 Cooperative domain

Figure 19. Graph of the co-operative domain.



HighScope workshop practice, by not only being recorded in all aspects of this domain except 'explanations' and by displaying large numbers of recordings across the board, dominate this domain completely. Similarly none of the other pre-schools are represented in any continuous way in this domain. From the latter it follows that the children within these other workshops were inhibited from areas of behaviour appropriate to this domain and the practices as presented were not optimal for children in this domain. The highest number of key categories is represented across this domain with ten creative development indicators across five categories. This does not show its relative importance to the other domains but simply enumerates the potential areas of creative development for children at this stage which were not provided for by the Steiner Waldorf, Montessori and Mainstream workshop practices.

4.3.4 Conclusion of art workshops findings.

The Steiner Waldorf workshop practice children excelled in all areas of expressive and artistic development and were the only children to demonstrate progression in artistic development which is through provision of their environment offering space for their creative ideas, art routine for weekly progression and thus consistent reflection of theirs and others art work. Mainstream highest recordings of objective behaviours were within technical skill and perceptual and cognitive development. This was due to the facilitation focusing on their skill development, offering reflection of their own and others art work and encouraging discovery and investigation. Montessori children were consistently building on previous skills while further learning new ones through the reflection of previous work and noticing details. This clearly puts their main development also within the areas of technical skill and perceptual and cognitive development. HighScope had the highest recordings of objective behaviours within the social and emotional area comparatively and this is highlighted by the findings due them leading their own art projects having full responsibility of taking care of the media they use.

In the social domain all preschools recorded high levels of positive responses to instruction, seeking approval and smiling and laughter. HighScope children work more consistently than any other preschool in the cooperative domain and show highest recordings comparatively in the highly social domain. HighScope art facilitation seems to encourage children to work mainly in these domains with most instances recorded in the cooperative domain when children are in free art class.
Steiner Waldorf workshop practice was consistently well above average comparatively in the highly social domain by commenting on own action to describe intent with eye contact and laughter. Steiner Waldorf workshop practice children appear very aware of their peers with the highest amount of peer dialogue and will watch them in the art process and communicate so noticing details in their work. Mainstream children worked together in all domains with their highest recordings being in the social domain. In the associative domain Mainstream children appear to interact through commenting on action and a small amount of self talk._Montessori

children also worked in all the domain areas with the associative and social domains being where most activity was recorded.

Through the observation tool Mainstream and Montessori workshop practices lead comparatively in the social domain which is due to the high instances during art experiences of adult and child recorded dialogue. The Steiner Waldorf workshop practice showed least recorded instances of adult to child dialogue which meant they were represented poorly in the social domain but which supported them in the higher social domain due to group discussions extending exchange of new ideas, sharing their progress and collectively engaging well through eye contact and body language. The HighScope facilitation is facilitated with emphasis toward the social to highly social domain with the facilitator interacting in group art experiences and helping the children extend their new developing ideas and the children's then further social interaction. Their instances recorded in the cooperative domain occur when the facilitator was removed from the free art space, during this art experience the highest child to child recorded dialogue was noted which led to group problem solving and theme development.

4.4 Conclusion to findings

This chapter has presented the data collected from all phases of the research. Any understanding of the methods of the pre-schools or children's creative development and creativity gathered in the literature review has made its way here through its incorporation into the judgements necessary to construct the primary research and thus collect the data in the first place. This was particularly true of the observation of pre-school art time where much depended on it. The findings presented from this phase of the research along with those from the interviews and questionnaires were already used in the construction of the art workshops action research phase and will be used in considering the relationship of theory to practice in the next chapter. They will also be used in triangulation of data in order to link the analysis of the art workshop action research phase to the practices of the pre-schools for analysis. Findings from the second phase will be similarly used to triangulate the data from the

social play continuum, learning through art and data gathered in the first phase with similar intentions.

Chapter 5.
Analysis and Discussion

5.1 Introduction

From its beginnings in attempting to formulate the symbolic and pre-cognitive nature of child development through a study of the links between the child art and prehistoric art with its geometrical and organic forms, this research has sought to understand creativity and its place in the general development of the child. Through the study of Piaget (1929) the processes beginning with the manipulation of symbols into schema, provided both a foundation to place the stages of development on, and a method of evaluating the importance of children's art by linking it to those foundations. Piaget, and the other developmental theorists, also provided a staged framework within which to assess development that can be broken down into observable objective behaviours. However, in doing so they raised questions regarding how to best cultivate this development. In valuing a certain developmental area or objective it is possible to neglect others or to subject the children to a forced march to the next developmental stage. The creative theorists while struggling with similar issues regarding the value of art in childhood emphasised its fundamental nature in the support of a child's experience and development. But here too divisions were seen in both the importance of allowing the development of innate organic factors as described by Herbert Read and represented by Piaget and Gardner, and the directive aspects of socialisation and skill development expressed in Lowenfeld (1947) and Vygotsky (1978). Both the theory and practices of the pre-schools are the testing place of these competing ideas, which means that any fair comparison of art in the pre-schools, its facilitation, or its environment must do more than take into account a set of objective data. Each practice and its value set must be situated in the theory evaluated in terms of its objective and the objective of the child's overall development before doing this.

Much of this has already been achieved, the literature review allowed both the situation of the pre-schools in the body of theory surrounding child development and an examination of the theory and methodology of each. The primary research has served to highlight the many subtle positions that populate the middle ground between the conflicting schools of thought mentioned above. The observation of pre-school practice and the art workshop action research phase grounded many of these views in actual practice where their affects could be measured and their limitations evaluated. With all of these findings complete it was possible to achieve the perspective necessary to situate each pre-school in the theory and evaluate it in terms of its objective and the objective of the child's development as mentioned above. It is therefore the assertion of this research that art, by its primordial link in the manipulation of symbols and its accessibility to the precognitive child, is vital to development in early childhood and hence to the child's access to and progression through all other stages of development. It is a further assertion of this research that the art experience should remain central to the facilitation of the child's development Chapman (1978). This entails the child's advance through the associative, social, and highly social domains. With this in mind this analysis will seek to answer the research questions by using these assertions as a foundation. It will present that analysis with reference to the impact of art on creative development, and hence the development of the child, by particular emphasis on communicating and expressing ideas, responding to experiences, imagination and exploring and experimenting, under the categories of perceptual and cognitive, social and emotional, technical, and expressive and artistic development. Since children in pre-schools are taught in groups and due to the complexity of the behaviours recorded, additional detail will be analysed from the social area of development through the categories of the social play continuum. Within these categories are the identifiable objective of behaviours used in the observation tool to quantify the: instance, where, when and how often the child engaged and developed through the art experience. Further to this the qualitative findings from the observation research were employed to analyse the influence of each pre-schools theory and practice through the environment, facilitation, child experience during art and objective behaviours and learning outcomes.

5.2 The benefits of an art experience for pre-school children's creative development.

5.2.1 Creative development in the pre-school years

During these early years the foundations are laid for every area of future development (Aubrey et al. 2000). This development proceeds at intense pace through numerous diverse and complex interconnected pathways Piaget (1929). This research has chosen from the developmental theorists and educationalists the categories of objective behaviour and the series of developmental steps that most adequately identify the areas of growth of children through the art experience which impact on creative development. In this sense the identification of these behaviours is evidence of milestones reached in the child's development. Creative development through art materials and the use of creative thinking skills are multi-layered and have overlapping developmental benefits as observed through various objective behaviours within the primary research phases. Creative development in the early years can be seen within art experiences as a child responding to experiences, using their imagination, exploring and experimenting through materials, expressing and communicating their ideas through creative thinking. It must be understood that these creative developmental aspects can rarely be separated. It is in the interplay between these elements of creativity that the greatest benefits to the child's development lie. Hence the manifold benefits of creative development offer the child growth and development beyond the art experience itself.

The creative development of imagination used in an art experience exemplifies divergent forms of thinking that can lead to original, inventive combinations of ideas and experiences which are important skills for lifelong learning (Donohoe & Gaynor, 2007). As seen within the primary research when the child is given an art space through provision of art materials, without the facilitator's influence of content, creative thinking such as fluency, flexibility and originality flowed naturally from the child. The imaginative aspect introduced through the provision of Steiner Waldorf's page and HighScope's free art space gave the children the freedom to make their own decisions thus benefiting the development of their problem solving skills. Despite the

two different approaches offering some variation of end results which were observed and noted through the children's objective behaviours, they still showed that elements of freedom are essential within an art experience to provide imaginative space to express and communicate children's ideas through the exploration of art materials, and hence support all elements of their creative development (Wood & Attfield, 2005). HighScope children showed more instances of behaviour than any other pre-school in using the mediums inventively due to the provision of a free art space and accessibility for a wide range of materials. However, with reference to these recorded behaviours the Steiner Waldorf pre-school were seen to further the benefits to the children of expressive creative thinking skills by helping the children be inventive in expression and overcoming obstacles to give form to expression and were therefore the only pre-school then to demonstrate progress through stages of artistic development. From this it follows that if creativity is to be developed through the broad aspects of objective behaviours the environment must be in place to support creative ideas in an art process (Feinstein, 2006).

The creative development of expressing and communicating ideas through art benefits peer collaboration through social and emotional growth (Epstein, 2009). When the provision of art space provides peer learning through interaction and the sharing of ideas, their imagination can be expressed, communicated and understood. As detailed from the data collection within the social and emotional area of the observation tool all the pre-schools progress children within this area by teaching them through a selection of ways to place a value on theirs and others art works. Steiner Waldorf's method is through talking about each others pictures as part of the art process (Oppenheimer, 2007), Mainstream and HighScope is through appropriate praise and the many visual wall displays of the children's art work (Epstein & Trimis, 2002; Bruce & Meggitt, 2005) and Montessori through the discussion and appreciation of many works of arts by the masters (Lillard, 1996). Even through the basic job of tiding up after each art experience the pre-schools all have a collective view of its social and emotional benefits for the child to take responsibility for the materials. A further highlight within the findings was that HighScope was the only pre-school in which the children were able through the environmental support of peer interaction during free art to take the lead in their own theme development within the group.

Engaging through discovery and investigation is highly valued by the pre-school systems in an art experience seen through the benefits of perceptual and cognitive development findings (Beaver et al. 1999; Bruin & Licthart, 2004; Epstein & Trimis, 2002; Montessori, 2005). This element of creative development can help children make further sense of their world through the sensory exploration and experimenting by: sight, touch, smell and movement (Larkin, 1981; Bamford, 2005; Burke, 2005). Encouraging the child to reflect on their own art work is practiced within all pre-schools thus increasing the value a child places on their work. Providing children with the opportunity to draw or paint can form the basis for the development of self-concept through artistic creative development (Lowenfeld & Brittain, 1987). Children can use their ability in art to make analogies which are important in learning since concept formation with abstracting is fundamental to create an object (Lowenfeld & Brittain, 1987; Gallagher, 2004). When creative development occurs in learning, be it an art experience, it enhances the use of their senses so giving them a sense of achievement (Smolucha & Smolucha, 1986; Shaffer, 2005; Wood & Attfield, 2005; Feinstein, 2006). The child's space and movements in sensory orientated art experience can help children build their sensory awareness stimuli bank, through rapid smearing and daubing, aiding the exploration of all their senses (Matthews, 1999; Nutbrown, 2006).

As mentioned earlier the factors of the environment, the facilitator, the objective of the art exercise and the provision of space and materials will all directly influence the child's journey through creative development (Gardner, 1990). The benefits of a creative art experience can offer children the opportunity and tools to respond to experiences. An art experience placed in a visually stimulating environment with a variation of art displays from famous art works to more eclectic sources can provide opportunities for experiences and thereby cause a creative response (Lowenfeld & Brittain, 1987). The social play continuum was in part used to identify the children responding to experiences within the art experience. It is plain to see that HighScope is better at preparing children to respond in the highly social and co-operative domain while Montessori are the best pre-school at assisting children to respond in the associative and social domain. If creative development is to grow in the key element

of responding to experiences through art the environment must provide materials and encouragement for children to use their imagination and knowledge so supporting their creative ideas (Gardner, 1990).

5.2.2 Impact of art on creative development in the pre-school years

Developing creative skills through art in the early years' art assists in forming a good foundation for creative thinkers in later life (Arnold, 2003; Bruce, 2004). Scribbling plays an important role in the development of the child in the early years due to its occurrence in relation to the origin of child development.

> "Although vocal expression begins very early in life, the child's first permanent record usually takes the form of a scribble at about the age of eighteen months or so"
> (Lowenfeld & Brittain, 1987, p.188)

By allowing the child to move through the stages of development that come before sophisticated linguistic, social or conceptual stages, it shows itself to be a more basic activity and hence more fundamental to the objective of both creative development and child development in general (Lowenfeld & Brittain, 1987). In the child's early years they pass through a period where they do not engage in group based activity or consistent social communication. During this time they are variously described as engaging in parallel play or operating in the associative domain (Broadhead, 2006). At this time the focus of the child is on much more immediate needs such as developing co-ordination of their body and their senses (Beaver et al. 1991). Art in the form of scribbling is one of the ways in which this co-ordination is achieved (Kellogg (1969). This stage is described by this research as organic in reference to its primitive origins and in the sense that the motivational force and the objective of the child's activity is all their own. The fact that their development is pre-social means that the child is not conforming to any of the concepts that will be used to define and assess their later development (Kess, 1997, 2003; Matthews, 1999). There are other activities the child can be involved in at this stage in their development which nurture this

organic quality, but it is the *representational* aspect of art that is so essential to both the creative development and the general development of the child. Through to the later stages of development when the child develops more sophisticated technical and social skills, the practice of art is a constant way for the child to non-verbally represent and thus reflect on their position in relation to people and things. When the child is in this stage, their art works are becoming gradual attempts at realism and the conceptual framework they have reached through developing social awareness and tuition is described as geometric by this research. Throughout these developmental and representational stages, art provides the context for connections to be made with many other stages of development while constantly providing a visual record to the adult. The impact of drawing skills and the content of children's pictures can reflect their intelligence and growth as it highlights their awareness of their environment through making connections in knowledge (Kellogue, 1969).

The factors such as the facilitation of art materials: control, range, accessibility and sharing, adult leading with: control, empathy or guidance, structure of space: communal, shared or individual and the objective of the art exercise: spontaneous/free, group and educational/product all impact directly on creative development (Gardner, 1990; Bamford, 2005; Burke, 2005; Wood & Attfield, 2005). The impact of skills that free art sustains beyond creative development, is the freedom for them to choose their own activity and their own group, thus promoting the use of higher levels of thinking and nurturing their social and emotional relationships with their peers (Lowenfeld & Brittian, 1987). Reflection during and after the art experience will extend the benefits of the art process through this developmental area as when a child produces a creative symbol they have already analysed it and conveyed its meaning so bringing various aspects of learning together which is inducive to cognitive development (Bruner, 1981; Gardner, 1990; Kess, 1997, 2003). Collaboration, through group dialogue or child to child communication, also supports peer learning by developing themes and ideas through problem solving. The collaborative approach of free art time or group art can provide sharing materials and space by working together in a self motivated project. These creative activities should stimulate interactive relationships through dialogue which will impact on and increase learning (Bamford, 2005; Burke, 2005). Key elements in social and emotional

development are appropriate self expression through self regulation, self identity and emotional honesty (Epstein, 2009). When an art experience offers through its provision of space or access to materials the sharing of these two areas this can impact on the development of self regulation just as working alone can also offer development of self identity and self-concept. Social and emotional skills needed in learning can be applied in an art experience such as: listening, problem solving and task persistence thereby impacting on creative development (Epstein, 2009). When direction and control are used listening skills and task persistence are developed, while guidance and empathy can also lead to task persistence and problem solving skills. Creative development through spontaneous art offers the child space to make their own decisions while sharing or communal art can support peer listening and learning. From all of the latter it can be seen that art plays a vitally important role in the development of young children.

5.3 The skills that support creative development in children through engagement with the art experience.

5.3.1 Creative skills developed through the art experience

As mentioned above in 5.2.1 the categories of observable behaviour in the art workshop observation tool are milestones reached in the development of the child. For children in their earliest stages these behaviours are based on incredibly simple reasoning and actions. In section 2.3.1 Matthew's studies of children drawing leads him to explain that 'attractors originate from muscular and sensorimotor responses to internal and external events' they 'become interiorized to form conceptualizations' and guide the 'child's interaction with the world' (1999 p.61). Through Piagets (1929) arrangement of symbols into schema and the constant reordering and reappraisal of these, the child is able to move from simple muscle movements through to recognition of forms and then on again to deliberate representation of these. Lowenfeld's (1947) description of the development of creativity from the scribble onward is an objective example of this. In this way it can be seen that the behaviours recorded by the observation tool are actually skills which develop from much more basic activity.

That said, this research concentrates on children's development within the pre-school years which approximately coincides with the child's development from associative through to the co-operative domains of social engagement (Broadhead, 2005).

Socialising factors are both a necessity of the pre-school environment and a central aspect of children's development at this stage. This is supported by the great emphasis on play that is stressed in child development theory and the curriculum of the pre-schools, and is reflected in the work by the addition of the social play continuum which will be dealt with under the next heading. In general the social and emotional skills needed to help children's creative development are: flexible group problem solving, task persistence and collaborative communication skills though this is truer of children operating in the higher social domains. These are supported through the encouragement of children taking turns leading art projects (Eglinton, 2003; Epstein, 2009). It is interesting to note from figure 13 that HighScope are the only pre-school practice in which instances of taking turns leading projects and allowing others to lead were recorded in the art workshops action research phase. This finding is typically reinforced by a look at the HighScope pre-school theory in the literature review. In section 2.9.2 it is mentioned that the sharing of control in an even handed partnership environment with the children is one of their most important strategies. Group dialogue in an art experience can develop the child's interactive relationships with their peers so aiding and developing group problem solving skills. Adult to child dialogue or instruction develops the children's listening and concentration skills. Through art these social and emotional skills can offer a deeper group/peer interaction so encouraging the children to respect and treat media, their own, and others, art work with care. Re-visiting figure 13 again shows observations of this behaviour were highest in Steiner Waldorf. Again, this is reflected in the Steiner Waldorf methodology which enshrines non-judgemental respect. In looking at this graph it should be noted that Montessori recordings of behaviour in this area are low despite the fact that Montessori children, through the use of the art folder and its further use in dialogue and discussion perhaps *should* show high representation of behaviour in these areas. A more detailed analysis of the Montessori Method will be achieved in later sections by way of explanation of these findings. If child to child and group dialogue space is provided, they can communicate with their peers for a deeper

understanding thereby making connections in learning and further developing their social and emotional skills (Nutbrown, 2006; Epstein, 2009). Group dialogue, child to child and self talk can show them working out their own ideas or developing a theme without much adult direction and being creative and inventive with art materials. The objective of an art exercise: group and spontaneous or access to materials can aid imagination and communication through the child making their own decisions (Bamford, 2005; Burke, 2005). Spontaneous and free art is supported by: freedom of space, movement, materials and ideas thereby engaging discovery using their senses through investigation. This can increase creative thinking through group dialogue and interaction thus encouraging engaging social behaviour.

Pre-school years are a critical time in the child's perceptual development (Chapman, 1978). Art materials assist creative development and support perceptual and cognitive growth by allowing the child to build on prior information and hence develop the ability to understand visual relationships through discovery and investigation and form deeper insights and new ways to visualise their experiences (Larkin, 1981; Eglinton, 2003). Skills required in the problem solving process for drawing and paintings are; cognitive conflict, knowledge retrieval, strategies and control process which involves awareness, reasoning and making judgements (Van Sommers 1984). Perceptual and cognitive development offer interaction for deeper insight aiding children in engaging in discovery and investigation and so using their senses to extract information. The skill development in this area is awareness of variations in colour, form and space which helps the children notices details, develop and decode simple symbols and can also help them understand nature's role in inspiration (Arnold, 2003; Bruce, 2004). Discriminatory skills can offer more reflection on their own and others artistic process thereby making connections in learning through encounters with art making and building on prior information. Figure 11 shows the observations of the relevant behaviours in this area. Steiner Waldorf was the only pre-school environment where a significant number of children were recorded as developing and decoding simple symbols. As mentioned in the introduction to this chapter symbol manipulation is linked to the most basic forms of thinking and therefore is a useful link for children who are moving from the earliest stages of cognition to more advances phases.

It seems a self explanatory point to explain the connection between art and expressive and artistic skills. However due to the relevance of the manipulation of symbols to the development of the child a brief digression to position this skill set seems appropriate. As mentioned in the introduction and earlier topics, participation in art practice, by occupying a place in children's development that is pre-cognitive, is more fundamental to the skills developed in a pre-school child than many of the other activities on the curriculum. Basic social, conceptual and technical skills are not necessary in order for art to be of value. This means that when a child is beginning in a pre-school environment and incapable of socialising in the higher domains they can still be reached through the practice of art and thus their development nurtured. From scribbling, through to realistic representation of themselves and the world they live in, art can therefore play a fundamental role and provide a thread that links the developmental stages.

Within the expressive and artistic developmental area reflected in figure 14 the bases of the objective behaviours focus mainly on the expressive ability and the understanding of the child to use art as a mode of expression. Further to this it observes the child's creativity and inventiveness within this developmental area (Eglinton, 2003). As mentioned earlier Steiner Waldorf and HighScope pre-schools excel within this area with the children displaying both an understanding of expression and an ability to be expressive through art. Their theories place a fundamental belief on this creative aspect and the findings support their delivery of practice. The creative thinking skills gained from overcoming obstacles and being inventive with expression all use elements needed within creative development. Montessori and Mainstream pre-schools have appeared briefly in the findings but progressive expressive and artistic development through art is not seen. This will be further analysed in the later sections but the collective reasons are that too much emphasis was is placed on adult led group based activities which are often product based with an educational objective. Technical skills are also over emphasised. For artistic and expressive skills to be developed the environment must be of overriding importance through the structure and should support and provide the components of creative thinking and further support the delivery of these ideas (Wood & Attfield,

2005). The adult leading with empathy or observation through the art experience can exemplify this environment due to the provision of emotional space to express as seen within Steiner Waldorf's facilitation method. The child being able to choose their own materials has been shown to produce a more creative process or product so aiding creative development as seen within HighScope. Therefore materials introduced to pre-school children should promote creative expression and they should be able to control and use that material (Lowenfeld & Brittain, 1987).

Technical skill development gives the children dexterity and fine motor skill development in the use of art materials thus supporting the creative process thereby the child can use media confidently and uninhibitedly (Chapman, 1978; Lowenfeld & Brittain, 1987; Eglinton, 2003). A focus on technical skills in the art environment is usually part of a larger developmental policy. The objective of the art exercise becomes geometric product based and educational. These facets of development are necessary but may not be inclusive of children who are in the earlier stages of development (Gardner, 1990). This issue will be addressed in the next section. All pre-schools place great importance on the children's staged development through the consistent progress of using two-dimensional media with purpose (Beaver et al. 1999; Bruin & Licthart, 2004; Epstein & Trimis, 2002; Montessori, 2005). Developing new technical skills children can build on previous skills from using one media competently through to the use of a selection of media with dexterity and the use of two and three dimensional materials with purpose. Mainstream's facilitation, objective of the art exercise and structure of the environment all proceed to follow through on the highest pre-school recordings of objective behaviours within this area. Mainstream children may not be consistently developing new techniques or providing inventiveness with media but within their theory of school readiness, technical developmental is achieved.

5.3.2 Social skills developed through art experiences

As mentioned in the previous topic the social and emotional development skills are central to the development of the child. This research has charted the development of the child from its simplest forms. At the early stages of social development children are not capable of social interaction and rely more on physicality and innate cognitive

'skills' to inform themselves about their surrounding world (Piaget, 1929). It is in this sense that this research understands the term *organically* motivated as art work that is unadulterated by the logic or concepts of the adult world and the nurturing process. These outpourings are meticulously described in the literature review and are fundamental to the work of many of the creative theorists. On the other hand there are those skills which are associated with behaviours in the highly social and co-operative domains. These are understood by the research as *geometric* in their motivation. Children who produce this sort of art work are greatly influenced by the aspects of socialisation and are already conforming to a world view through the concepts employed in their art. Children's creativity actually decreases during this phase (Torrence, 1970). In the introduction to this chapter, the different schools of thought regarding child development and creativity were outlined and the question of how the pre-schools value art experience was raised. The environment, curriculum and facilitation practices of a pre-school which values skills that are more appropriate to children in the *geometrically* motivated highly social and co-operative domains will therefore not suit children who are still progressing through the lower social domains who need to are still motivated *organically*. These issues go to the root of this research and will be used to evaluate pre-school practice in sections 5.4, 5.5 and 5.7 of this chapter.

The Domains within the social play continuum have helped identify children putting into practice creative, expressive, social and emotional key elements skills (Broadhead, 2005). The co-operative domain highlights higher levels of thinking, developing themes and ideas, task persistence, problem solving, collaboration and self regulation. The higher social domain identifies adult and child shared interaction through exploration and group communication. The social domain shows adult direction, child and adult dialogue, some creative aspects, listening skills and educational skills. The associative domain highlights when the child is un-involved socially in the activity and greatly reduced creative growth. It also highlights that rather than engaging with other children it suggests they are still able to develop self identity through personal emotional space. The key elements of creative development are clearly defined in each domain by the language used to explain an observation action. What follows is a brief discussion on each of the pre-school's significant

objective behaviours noted through the social play continuum. The further analysis focuses on the impact of their art methodologies through the influential factors of the facilitator, the objective of the art exercise and the resultant learning outcomes for the younger and older children.

The HighScope theory places its foundations within an even handed environment of shared adult and child leadership with the goal of creativity and not conformity. The encouragement of this self direction and child to child concentrated dialogue assists the children to express and communicate through an art experience. The recorded instances of behaviour of children creating novel ideas and displaying a shared understanding of purpose through explanation were facilitated by this policy. The more explorative and imaginative aspects of the cooperative domain are again supported by the provision of free art by HighScope, allowing the children to discuss new ideas with their peers while engaging through the sharing of art materials thus extending the groups imaginative and explorative theme. However, the majority of their social and emotional creative interaction is set within the highly social domain. The children are recorded in all objective behaviours within this domain thus sustaining their expression and communication, exploration and experimentation, using imagination and responding to experiences. This creative interaction was identified through sporadic conversations while commentating on their own actions and the sharing of original ideas. The HighScope system is the only pre-school whose children's creative development can be seen progressing socially up into the co-operative domain.

Mainstream pre-school are briefly engaged within the co-operative domain as the children use their imagination through sustaining conversations and offering to help through dialogue which places in part their theory of encouraging children to develop social skills during group art. This was their only recorded activity within this domain due to the product content of the art experiences and mainly adult led facilitation. This has placed them firmly within the social and highly social domain. The children using their imagination are identified briefly again in the highly social domain through the sharing of art materials to develop the theme with further creative interactions through: expressing and communicating, exploration and experimenting and new

ideas further extending their theme. The rest of the actions observed within this domain were focused on social rather than creative and this ceiling on creative development is mirrored within the quantitative data from the art workshop observation tool.

The Montessori pre-school as mentioned earlier in the findings section 4.4.2.2.3 has the least recordings of peer dialogue. Within Montessori activities their focus is on indirect learning through self-directed activities which are mainly chosen by the child and not due to a group agenda. Therefore as illustrated through the social play continuum a reduced creative interaction within this social spectrum is seen. This said when engaging within the associative domain the children do creatively use imitation and play actions and children were also recorded responding to experiences, exploring and experimenting and further using their imagination through self talk. Two of these aspects of creative development are also seen in the social domain with the children accessing art materials from the facilitator thus increasing their exploration and experimenting and further responding to experiences once they reacted positively to adult instruction. These two interactions can be seen clearly as child to adult engagement but the facilitator did encourage some creativity when discussing the artist folder and stepping out of the direct art space.

Steiner Waldorf's art methodology places its foremost emphasis on social, creative and cognitive development within the art experience. The social play continuum illustrates clearly through the social and emotional recordings of children using a wide range of: imaginative ideas, exploration and experimenting and expressing and communicating. These instances were all placed within the associative, social and highly social domains with no noted instances within the co-operative domain. Expressing and communicating with original ideas to develop themes and commenting on their own actions to their peers was noted with high instances within the highly social domain. The use of imagination was recorded in both associative and highly social domain through self talk and sporadic conversations to develop themes and ideas. Responding to experiences creatively was noted in the social domain through peer interaction due to the observational role of the facilitator who is usually removed from the children's space thus increasing peer interaction.

During the art experiences the consistent growth of behaviour's within many socially developmental areas vital for children's future skills were observed using the social play continuum. These can be seen within the associative domain starting from *organically* motivated beginnings and progressing up and through the social complexities to the *geometrically* motivated behaviours of the co-operative domain. As children develop into more social creatures they should be seen to be choosing co-operation over competition thus working collaboratively during group art or supporting some aspects of socialisation within individual art. These particular objective behaviours can first be seen within the highly social domain through brief moments of reciprocity and the children happily giving and accepting the art materials. Montessori and HighScope pre-school children worked most collaboratively here with some noted instances from Steiner Waldorf and least from Mainstream. Within the co-operative domain the further development of these skills were identified when the children used both verbal and physical to help each other and were somewhat developed by HighScope but more so by Montessori. Increased co-operation over competition was observed while Montessori children were engaged in group learning through the use of the colour boxes. The older children would help the younger ones put the colours in order of tone. Further collaborative group work was seen in the sharing of objects and sustained and extended play. What is seen very clearly from the findings is HighScope dominance in the co-operative domain. The children work collaboratively with high frequency through free art and the sharing of ideas was observed to turn the art experience into play thus supporting both creative and social and emotional growth. The social and emotional development of appropriate self expression was enhanced through the growth of self awareness and self regulation. These areas of development were observed starting in the associative domain and noted through imitating play and or watching play. Montessori dominated throughout this domain. The children of the other pre-schools did engage in both these behaviours but engaged less in imitating play. The collection of objective behaviours such as commenting on their own actions, making eye contact and laughing as combined behaviour clusters were led by Steiner Waldorf and HighScope pre-schools with reduced actions by the other two pre-schools. Therefore the analysis of the overall placement of each pre-school within the domains can be understood.

Mainstream due to the facilitations directive and guiding aspects within the art exercise maintains the children's social engagement and learning frequently within the social and highly social domain. Montessori children will engage more frequently within the associative to social domain with sporadic placement in the highly social domain due to self directed activities and high adult to child educational engagement through group art based activities. HighScope are most active within the highly social and co-operative domain resulting from the range of art activities within their pre-school routine, emphases on social activities, provision of free art and the facilitators removal or guiding investigation during the art activities. Steiner Waldorf are sporadic in the associative and social domain with most activity placed in the highly social domain as the social emphases is placed within the art exercise, the ease of the children in this conversational atmosphere supported by its routine and no direct adult influence on the content of the art piece. The conclusion of the social play continuum analysis informs us that the facilitator not only increases or decreases social interaction but the facilitator can also extend or limit additional learning of the children within the art experience.

5.4 The most successful facilitated approach for creative development.

5.4.1 Introduction

The definitions of facilitation highlighted through the observation tool were the controlled use of: time, space, materials and how the children were verbally led through an art experience by the facilitator. The literature review looked at how these factors can influence learning through art, the child during the experience and how creative development can best be offered and supported through art. Control elements were introduced into the art workshops in order to overcome the difficulties of comparing pre-school methodologies when factors such as the environment, the sizes of the groups involved and the differences in the children's ages and developmental stages varied. Each pre-school however, does not have the luxury of controlling many of these factors. In consequence the correct practice of facilitation becomes a more important issue. From a certain standpoint, all of this research has been done in order

to evaluate and prescribe the most successful facilitated approach to childcare. The introduction to this chapter outlined a process ranging from the study of the origins of art and creativity to the developmental and creative theorists, and including both the theory and practice of the different pre-schools and the questions of value that these studies raise. This section aims to complete that process by providing a full analysis of the facilitation methods of each pre-school.

5.4.2 Facilitation and the value of art in pre-school practice

HighScope place a strong emphasis on perceptual, cognitive and technical skills and indeed the quantitative analysis shows high instances of behaviours in these areas. The concern here would be that such an agenda would lead to excessive use of steps to reach a goal, control in the facilitation of the children and too much emphasis on imitation and product development. This would lead to diminished creativity, and hence block the child's social or expressive and artistic development and the associated learning outcomes. In the quantitative findings HighScope show more recordings of behaviours within the expressive and artistic area than Montessori or Mainstream and are second only to Steiner Waldorf in this regard. A look at the theory of HighScope shows that they have side stepped the issue of control in the facilitation that they use by involving the children in an even handed partnership environment. Art itself is greatly valued in the HighScope curriculum. The art is not always product based and its goal is creativity not conformity. Free art time is provided for the children which has no adult intervention at all. All of this scope in the agenda gives the children plenty of room to exercise their imagination, inventiveness and own ideas. Similarly, the facilitative methods of HighScope seem to encourage social and emotional skills. The children are encouraged to be reflective in relation to their art and the pictures they are introduced to. And these art works are shown to be valued by use of a wall display, individual folders for the children and allowing the children to take their work home. The children are encouraged to 'move and develop group dialogue' thus developing their social skills; however the initial quantitative findings showed them poorly represented in social and emotional behaviours (figure 13). This is made clearer by further observation through the social play continuum (figure 15), which show HighScopes children much more frequently

represented in the highly social and co-operative domains. Group art activities in HighScope are facilitated differently than free art. The facilitator fully engages the children and encourages them to investigate through theme development and when technical skill development and construction is required this becomes more directive. This change in facilitative emphasis means that through the objective of the art exercise activity, greater emphasis can be put on the perceptual cognitive and technical skill areas of development. This is in part achieved through the use of theme work that concentrates on perceptual and cognitive associations being made and more product based work that stresses collaboration, shared leadership and co-operation. This is further reinforced through repetition and task persistence is encouraged through allowing the necessary time to finish each group project. The quantitative research shows HighScope to have the only consistent observed behaviour across the co-operative domain. Against this they are poorly represented in the associative and social domains. This would suggest that younger children might initially struggle in this preschool practice due to their developmental stage.

Montessori pre-school methods and values are subtle and their emphasis is not on art as a means in itself. Imagination and creativity are stated to be important within Montessori theory but they do not actively encourage the routine of free art in practice and the general focus is on creativity with a view to developing independence and technical ability. The range of materials are limited in the free art shelf and controlled in group art. The facilitative benefits of repetition to memory and associated learning skills are greatly reduced by the random nature of the daily activities. This is because the children are self directed most of the time. Similarly theme development is minimal and usually associated with group art which again is not practiced often. The facilitation of art is based around colour differentiation which is controlled in the sense that the colours are fixed. Much emphasis is on technical skill development but there are opposing elements. The children are made to use ridge restrictions when tracing shapes which greatly reduces creativity. The children are encouraged to draw lines within these shapes. Art is also practiced at an easel where each child must stand on front of their peers which develops confidence. The easel is placed in a corner of the room and hence the child has their back to the other children during this activity.

The art is then placed in a personal folder which develops self esteem and fosters value for their work.

In practice the facilitation was guiding but directive and corrective at times. Use of the artist's folder was facilitated with control over time. The content of the art folder was the art of the great masters which the children are encouraged to discuss imaginatively but is arguably rather limited in its scope with regard to the development of the imaginative and explorative aspects. Overall there is a strong educational objective in the facilitation. It is perhaps not surprising then that the quantitative findings show Montessori recordings of developmental behaviours are below all of the other pre-schools in the areas of social and emotional, technical skill, perceptual and cognitive development. They are marginally more objective behaviours recorded than Mainstream in expressive and artistic development but these recordings are dwarfed by those of HighScope and Steiner Waldorf pre-schools. These findings however can be understood differently when the records from the social play continuum are taken into account. In figure 17, Montessori show substantial recordings of behaviours in the social domain. They are better represented than all except Mainstream in this domain and HighScope and Steiner Waldorf pre-schools do not show well across its categories. Furthermore, they completely dominate the associative domain. Montessori facilitation with its emphasis on self direction and very basic technical skills uses strong direction applied sporadically. Moreover its concentration on individual development as opposed to group work with its collaborative and co-operative aspects was seen as a far more suitable facilitative environment for younger pre-school children in the early stages of socialisation.

Steiner Waldorf pre-school places a strong emphasis on cognitive skills, the materials are controlled in the objective of the art exercise and two colours are only used while painting with the intention of allowing the child to pick out specific details of their coming together on the page and controlling their use. By facilitating this through empathy the child develops their judgement and fine motor skills. The facilitator will often sit and paint alongside the children thus giving the exercise the feel of a shared purpose and allowing the facilitator to observer the child at the same time. Despite this the facilitation of materials is strict in its provision and use, and hence does not

allow the child to fully develop freedom of inventiveness and exploration through them. Expression *is* encouraged strongly by the introduction of fantasy elements and this is seen to be vital in encouraging cognition through the child making connections. Nevertheless the intention of the facilitator is to teach by encouraging imitation, thus control of process and product is subtle but strong. Space is also subtly controlled the children have individual places to sit and freedom is allowed for the child to decide when the activity is over and leave. Reinforcement is strong in time and the objective of the art exercise with each week repeating the previous week's format. Theme development is based around nature but otherwise is absent from the facilitation and developed more from the environment. The facilitator will also emphasise the link to nature in the reverence that the children have for their materials. The facilitator will sing to the children in order to create associations between music, their artwork and movement. Again this is valuable as both theory and practice confirm the use of song for more directive elements to be introduced with regard to the process and use of materials. In this way the Steiner Waldorf facilitation of process places great emphasis on method through the repetition of purposeful steps and thus increases technical skill development. Social and emotional skills are also greatly valued in the Steiner Waldorf methodology. The children are encouraged to read their paintings peer to peer and in group discussion. There is no time when the child is expected to present their own work to their peers and similarly pictures are not hung from the walls. This is part of the Steiner Waldorf belief that judgement of the children is not good at this age; however some of the children may benefit from such experiences. In analysing figure 15 it can be seen that Steiner Waldorf behaviours are sporadic in the associative and social domains and dominate the highly social domain. While in keeping with their value for social development the behaviours are not seen to progress on to the cooperative domain. This was interpreted as a result of the control of space, strong emphasis on individual as opposed to cooperative activities during the art activity and the strong control of process and product which restricts more socialised children. Similarly emphasis on control of space, the objective of the art exercise and materials can affect children in the lower domains by not allowing them to express themselves freely and the emphasis on procedural steps could reduce opportunities for self expression. This also forces the children in the associative and

social levels into more *geometric* ways of thinking and hence reduces learning outcomes for them.

From all of the latter it can be seen that Steiner Waldorf art facilitation includes substantial outcomes across the four areas of expressive and artistic, perceptual and cognitive, social and emotional and technical skill. Their recordings of behaviours under these categories as seen in figure 10, lead the pre-schools in all areas of development except technical skill where Mainstream lead. Despite this the focus of this research is on art and creativity in *relation* to child development. The research found that while the Steiner Waldorf children excel in creative expression some of the benefits of their facilitation are out weighted by the control elements such as more movement during the art experience and inventiveness with a range of materials.

Art is greatly valued within Mainstream theory, but in practice the content is facilitated with great stress on technical ability and educational objectives. Learning outcomes are reinforced by continual repetition, hands-on practice, routine and task persistence. As the facilitation is largely directive, educational and product based the children become very good at listening and concentrating, and are persistent at tasks. The facilitation occasionally involves splitting the children up due to age and ability and this may have the benefit of assuring the objective of the art exercise is suitable to the developmental stage, but includes the negative quality of limiting children's learning from their peers. Materials are controlled during the art activity but a great variety is available. Group projects are time controlled to fit the daily routine but developed through a theme so some aspects of individuality can be included. Encouragement for individuality is reactive in this activity as opposed to active. The facilitator moves around a lot in order to make sure the children are highly encouraged and technically effective. Fantasy is not an element of the facilitation as the product base of the objective of the art exercise is too restrictive. In effect creativity, art, exploration and experiment, and expression and emotion are all rarely facilitated for in the Mainstream practice. Again with reference to the social and emotional aspects, the absence of individuality despite all the space and peer interaction means that the richness of the social and creative aspects are greatly limited. A look at the quantitative findings in figure 10 shows not surprisingly that

Mainstream show more technical skill development than any of the other pre-school systems. Their perceptual and cognitive behavioural instances are equally high and rank well against the other schools. Steiner Waldorf and HighScope pre-schools are comparatively better and this was again seen to be the result of the limitations of scope, the concentration on product, the lack of imaginative content and group problem solving activities. Expressive and artistic development is where Mainstream really performs poorly. This is seen as a direct result of all of the above. Mainstream rank third in observations of social and emotional behaviours but this must again be subjected to further analysis through the social continuum. In figure 15 it can be seen that the emphasis on socialisation in the Mainstream method is reflected by it being well represented in the social and highly social domain. They are less effective in the co-operative domain with observations of instances falling off there. This again was seen by the research as a result of poor inclusion of children with higher social ability in the objective of the art exercise. That said it should be noted that Mainstream are represented in all the other social domains to some extent. Their appearance in the associative domain was shown by the research to be an indicator that the approach of splitting the children up according to their developmental stages has benefits for their development. While the splitting of the children is not necessary, the facilitation of the objective of the art exercise must acknowledge the different social developmental stages of a group of children and alter the facilitation methods and the objectives of exercise accordingly.

5.4.3 Maximising art facilitation in pre-schools for creative development.

In free art time access to a range of materials can provide the tools for exploration so giving children the opportunity to make their own creative decisions (Donohoe & Gayner, 2007). There are developmental benefits to restricting materials to a smaller number (Gardner 1990). Limited materials means cognitive perceptual and technical connections to learning are simpler and mastery of the materials is easier for the child. Nevertheless the freedom and accessibility to a broad range of art material supports the children's decision making skills and problem solving and allows investigation, self expression and the development of dexterity (Wood & Attfield, 2005). Since

those children in the lower domains who are *organically* motivated and therefore depend less on verbal communication can only benefit from the freedom of using more materials to express themselves and the *geometrically* motivated children in the higher domains can be assumed to have the capability of handling a wide variety of materials this research concludes that less control and more range is better for the facilitation of materials to children of all developmental stages. Sharing materials in free art offers more peer learning through interaction and group sharing of information and should therefore also be encouraged. By offering the child complete control over the elements of time and space free art supports imagination and collaboration and this can lead to the development of higher levels thinking (Bamford, 2005; Burke, 2005). It was seen as effective for the facilitator to remove themselves completely from the free art space during the observation stage of this research. There are multiple developmental benefits to this approach. The children in the lower domains can express themselves with a freedom and absence of control that is necessary to this time in their creative development. As above at this time they are less social and more dependent on other means of expression. In the higher domains the children are able to use this time for taking turns to lead, and developing collaborative and cooperative skills (Eglinton, 2003; Epstein, 2009). All of this supports vital social development and its many associated learning outcomes.

Group art through indirect adult instruction should also support peer learning through the social interaction of the group sharing information (Vygotsky, 1978; Lowenfeld and Brittain, 1987). The facilitator should know each child's ability and change their facilitation method to suit the developmental stage of the children especially with the children in lower social domains (Chapman, 1978; Eglinton, 2003). Varying the objective of the art exercise within the group as opposed to splitting the group on the basis of age or developmental stage was seen as vitally important to the creative development of the children. Sporadic use of strong direction and emphasis on basic technical skills should be employed in facilitating the children who are in the lower social domains and greater elements of uninhibited freedom, imagination and exploration should coincide with this approach. With the children in the higher domains, leadership should be shared with regard to the objective of the art exercise. A less directive and more collaborative and cooperative approach should be used. The

routine of a particular group art activity should not become too repetitive for older children and the facilitator should always lead through the encouragement of group; investigation, exploration and problem solving. During the art experience the facilitator should allow the children to concentrate once engaged in an activity some discourse to support their exploration when appropriate (Matthews, 2003). All children benefit from praise which should be appropriate, non judgemental and even handed (Ni Mhurchu, 2003). Music and movement should also be included with the art in order to form perceptual and cognitive connection and the child to engage in a more sensory art experience. For children to make connections in learning the facilitator should lead some art experiences through a theme development and all the objectives of the art exercises should be based on something the child already knows thus building on previous information (Nutbrown, 2006). As mentioned earlier direction is needed due to technical ability and the age of the children but constant direction and total control will greatly reduce sharing of creative ideas, exploration and self expression. The facilitator should step back from the art space thus encouraging the children to see themselves as doers, based on their ability to reach self-initiated objectives (Epstein, 2009). To support the previous two points the facilitator should encourage peer support through dialogue, hang their art up but only if the child wishes and paint in front of the children while making their own mistakes and using self talk to correct (Luquet, 1927). Similarly singing is good when used in the facilitation but should not be used for directive or controlling aspects. With all of this in mind the facilitator must always provide inspiration and enthusiasm through the creative process and develop the child's awareness of their environment through the art experience (Lowenfeld & Brittain, 1987).

5.5 The optimum environment for creative development through art

5.5.1 Introduction

The definitions of environment within this research assessed: the physical environment, the provision of art space through structure, the objective of the art exercise and the age group involved. The physical environment of the art space

observed was always in part of a general room and the age group where nearly always mixed. So these elements have been accepted as controls in this research for the main practice of art in childcare services. The provision of space is the structural foundation for which the objective of the art exercise takes place, therefore it has similar influences to the facilitator as they can increase or decrease developmental aspects of learning outcomes and the overall experience of the child during art. For creative development and learning to take place the provision of the art space and the objective of the art exercise must be situated in an environment which supports creative ideas, self expression and exploration (Eisner & Ecker, 1966; Lowenfeld & Brittain, 1987; Gardner, 1990; Eglinton 2003). Each pre-school environment follows their own various prescriptions and many of their important influences have already been analysed within the previous section due to their overlapping nature. In this research many of the important aspects of the environment with respect to its limitations on the objective of the art exercise are analysed in terms of their delivery with the facilitation and its effect on the creative development of the child.

The Steiner Waldorf method places emphasis on the reflection of nature's colours and elements indoors, and the ready use of quality natural art materials upon the facilitator's instruction. Their art time is constructed around a large communal table with individual workstations that include each child's own art materials. The provision of art experience therefore supports spontaneous and individual art. Within a less structured environment and through less control of the materials, Mainstream also places the importance in the provision of a communal table for art but with a noticeable emphasis on group art through the sharing of a wider range of art materials. The Mainstream environment is visually rich with many examples of the children's art work. Similar display and exhibiting of the children's art can be seen in the HighScope environment where they have developed the visual display one stage further by the provision of the child's individual wall area for their personal art works and group art work. HighScopes environment is more prescriptive from theory and is set out to promote active learning through the provision of a free art space with a readily accessible range of art materials and space to support their individual creative ideas which is adult free. Montessori also provides a space for free art but through a different approach. Their environment provides the ready use of an easel, a shelf with

paper and colouring materials and the further provision of rugs for the children to draw on the floor none of the other pre-schools were seen to offer the children the space to get away on their own to draw during art time. Montessori practice also differs from HighScope in that Montessori free art time is not part of a routine and the children's art works rarely displayed on the walls. What is imperative to mention is that during the primary research observation of the many different art environments the children only truly developed their own creative ideas and self expression when the facilitator removed themselves completely from the art space as noted in Steiner Waldorf and HighScope. Within each pre-school the role of the facilitator is pivotal since the facilitator stands between the child and limitations of the environment, the choice of the objective of the art exercise and the accessibility of materials through control.

5.5.2 Provision of space

Considerations regarding structure within the art environment should provide for the maximum variety of art experiences. Thought should be given to a variation of: shared, communal and individual art work space to offer a high quality programme (Essa & Burnham, 2001). The ubiquitous features of the table, the chairs and the size of art space should all assessed for significance as they can increase or decrease the numerous aspects of peer interaction, developmental and learning outcomes, and movement of the child by their position within the overall structure and permitted access to social interaction and areas of provision. Group art should offer the children shared space around one large *round* table with chairs placed spaciously around. The table itself should be in the middle of a room providing further space for chairs to be moved back thus offering the facilitator or child physical room to step in and out and between each other's work area (Larkin, 1981). With these factors in mind the overall reasoning should be to increase space for interactive dialogue, the sharing of ideas and information, movement into each other's space and sharing of materials for exploration (Epstein, 2009). Comparable elements to this structure should be considered for communal free art space comprising of two smaller tables with chairs and space for movement. This can also be used during art time for the children to develop distance from their peers and practice art in individual space if not

provided elsewhere. Ideally the prepared environment supporting free art should also have in its provision some individual workstations for the child or children to sit and create in a contained quieter area or the provision of rugs for the child to use when finding their own place for creativity.

5.5.3 The objective of the art exercise

The objective of the art exercises should include individual, group and free art which can offer the overlapping aspects of spontaneous art, an educational function and a product/theme base content (Epstein, 2009). For individual art work the objective should be to support spontaneity with no expectant content and the facilitator's influence should be removed to an observational role. The children can sit together albeit within areas of self contained art materials hence space for their ideas, imagination, self expression and exploration thus choosing to communicate verbally or non-verbally. Group art should be delivered through a range of meaningful projects encouraging interactive dialogue and movement thus younger children learn from peers and older children work together to group problem solve (Bamford, 2005; Burke, 2005). An educational function should be in part for technical skill, dexterity and develop children of all ages to be competent users of materials. Group art can also offer a product/theme based experience thus helping children make connections in learning and increasing perceptual and cognitive development by engaging in discovery and investigation (Lowenfeld & Brittain, 1987). Free art should always be included in the curriculum and its objectives should offer individual ideas. Whenever free art became group based this research noted the sharing of ideas through spontaneous art turns into play with its associated learning outcomes. A product based finish should not be expected within free art and the educational function will lie within the social and emotional development of self awareness and co-operation over competition.

5.5.4 Maximising the environment for creative development

To optimise the creative environment the recommended provision of space and variations of art experiences must be implemented within a weekly time table or

routine. The objective of the art exercise should always be expanding the child's knowledge of the environment and their place within it (Eisner & Ecker, 1966). Therefore elements of the nature should be part of the art experience through the various seasonal changes, zoological and botanical components. Art experiences can take place outdoors or a walk beforehand can allow the children to bring items back to create with. Further sensory imagery such as music and singing should be encouraged during an art experience and should also involve movement thus increasing physical and perceptual development and its learning outcomes through making connections (Nutbrown, 2006). A table should be provided with eclectic pictures from many sources and materials of different textures and colours for the children to uninhibitedly explore the tactile and sensory connections and discuss thus benefitting conversational skills, reinforcing memory and other significant learning outcomes. The objective of the art exercise should in some cases run over a few days hence developing a theme and ideally should be permanent, ongoing and visible to the children in their environment. This greatly develops task persistence and provides ongoing responses to experience. It is a significant theme within this research that all art experiences let the children develop at their own pace with the facilitator aware of each child's developmental stage and their progressive abilities (Chapman, 1978). Within a mixed age group art experience, children at earlier stages of development are organically motivated. The role of the facilitator in delivering the objective of the art exercise therefore becomes key for the child's creative development. The objective of the art exercise should be altered for these children in order for it to be achievable thus affecting the child's self esteem (Epstein, 2009). Rigid production is not beneficial to children at this developmental stage. The objective of the art exercise should see the facilitator painting quietly beside the children so providing a shared purpose or correcting developing skills through self talk (Luquet 1927, 2001). Direction should be sporadic and they should also step away as much as possible in order to allow the children free reign to express themselves. The facilitator should use the time made available from stepping out of the group activity of the children at the higher stages of development to concentrate on the individual aspects of development in the younger children as their poorer social development means they need more individual attention. Free art is vital for the younger children as their innate need to express and freedom to respond to

experiences while using their imagination needs to be provided for (Gardner, 1980). Whilst the older *geometrically* motivated children in group art should have an even handed share of the theme development and some input into the objective of the art exercise through the facilitator during the art experiences. This discourse shared between them helps to build on previously learnt skills (Matthews, 1999, 2003). The overall emphasis of the objective of the art exercise, when based on explorative themes for discovery and investigation thus: develops the children's group problem solving skills, emphasises co-operation over competition and encourages collaboration in the development of ideas. Free art is also vital for the older children for the previous mentioned objectives of the art exercise (Eglinton, 2003). For all developmental stages the provision for free and individual art should offer personal physical and emotional space for some quiet self reflection in a shared structure offering communication as a choice.

5.6 An analysis of theory to practice within each pre-school system.

5.6.1 Mainstream System - Key points of theory to practice within the art experience.

The environmental structure and the objective of the art exercise observed in practice only partially support Mainstream theory. In keeping with theory, the positioning of tables and areas of provision within the space and relative to each other did not display much structure (Bruce & Meggitt, 2005). Mainstream was the only pre-school seen to split the children into developmental stages. While this is not a key point of theory the broad nature of the prescription of theory in Mainstream means that it can be interpreted in this way by the facilitation without contradiction. This applied to many other areas of practice within the pre-school. From the latter it should be noted that in criticising theory to practice in Mainstream it is not so much a matter of whether the theory was implemented or not, but more so about the emphasis on some areas of theory rather than others. Mainstream theory prioritises the children making connections in learning, offering space for their self expression and exploration through experimentation (Beaver et al. 1999). In observation the

facilitator principally used art time as an extension of theme development which allowed the children to make connections in learning. The practice employed constant group orientated art experiences and the provision of social interaction through which the children shared a wide range of materials (Bruce & Meggitt, 2005). This meant that the scope for self expression and exploration was limited to the use of the materials and its individual aspects were almost absent. This is due to a higher emphasis on technical skill within the Mainstream system as an educational approach. Sensory exploration emphasised in theory through art materials was not frequently practiced and was limited due to the particular focus placed on the correct usage of media in creating an end product thus reducing the opportunities to be inventive with art materials (Bruce & Meggitt, 2005). In a similar vein, learning outcomes from the combination of different perceptual elements was minimal in practice and reduced to movements while painting or hand painting in the art experience. The provision for self expression and the development of the child's imagination, as published, was not practiced due to the facilitator's direction and the group aspect of most art activity (Beaver et al. 2008). In some instances a self initiated deviation in product construction by the child was supported by the facilitator but by in large, imaginative, expressive and artistic development was not catered for. The facilitation in practice was directive through instruction and progressed through hands-on guidance within the art experience. In theory this should see the facilitator stepping back more from the direct art space to observe but this did not translate into practice as observed (Beaver et al. 2008). However, the directive element and the objective of the art exercise developed the children's concentration skills thus bringing together a key theory learning outcome. The practical value placed on their work by the facilitator was supported by praising each child's picture, encouraging children to value their own and their peer's art work and a vast display of their work. The art experience in the class room structure in practice consisted of one or two big tables and chairs for all the children to sit together at thereby supporting the theory of developing communication and interaction. Art materials were not necessarily visible or readily accessible for the children to directly access for the exploratory aspect of the theory. Overall the practice was seen to put strong emphasis on the areas of technical skill and perceptual and cognitive development, although what was lost from practice to theory was the inventiveness and consistent development of new skills with art

materials. The artistic and expressive development was greatly reduced as mentioned earlier due to the lack of provision for self expression which limited any progression within the theory. The practical social and emotional development which is stressed in the theory did teach children to treat theirs and others care and art materials with care although the children did not progress through opportunities to problem solve or develop new ideas. As mentioned earlier this was seen to result from the facilitator and child dialogue and facilitation content of the objective of the art exercise.

5.6.2 Steiner Waldorf system- Key points of theory to practice within the art experience

The environmental structure and the objective of the art exercise observed in practice faithfully reproduced the main thrust of Steiner Waldorf's theory. Their provision of a large table was constructed into individual art workstations as detailed in theory. The art materials before the art experiences were not necessarily visible or accessible to the children but the nature table area was present with all natures elements, thus supporting Steiner Waldorf theory. As published the consistent provision of two colours of paint and a selection of crayons did develop the children's specific dexterity within them. The main developmental goals within Steiner Waldorf's art theory to support social, emotional and cognitive growth through indirect learning were again practiced to implement their theory delivery. To achieve this environment the practice offered the emotional freedom of self expression through the child's page and the use of art for this mode. The social objective of the art exercise in which peer dialogue is developed into group discussion thus encouraging children to 'read' their pictures was observed on each occasion. The perceptual and cognitive development of space to reflect and make connections was also provided by the practical environment through the supporting facilitation. Facilitation was led through theory with empathy, imitation, quiet example or singing and guiding the children to treat materials with reverence. Drawing and painting were in place as part of the weekly routine again fulfilling theoretical practice. The practiced facilitation left children to paint unconsciously without direct correction thus letting the children communicate with their fingers. The facilitator sometimes sat with the children to paint or draw thus sharing in their purpose and in part placing value on the process. Another aspect of

value placed by the facilitator on the children's art was that they did not have the children's art arranged in wall displays and concentrated on the children reflecting on their pictures and putting them in personal folders which would then be taken home either at the end of the year or term. This was practiced so not to judge the children's work and further offer opportunities to develop perceptual and cognitive development by noticing details and building on prior information. All of this was similarly in line with the Steiner Waldorf theory. The children's communication moved through the associative domain to the higher social domain during each art experience. This further supports another key learning area by developing the children's skills through socialisation and discussion. Each child had enough room in their own individual art space for the sensory movements of rapid smearing and daubing to the thoughtful poise of the paint brush before creating. The walls and ceilings had hand crafted objects displaying crafts by the children and adults thus supporting the Steiner Waldorf pre-school aims and objectives of a creative environment.

5.6.3 Montessori system- Key points of theory to practice within the art experience.

The environmental structure and the objective of the art exercise observed was largely reflected in the practice. Within the Montessori theory on the environment is the prescribed provision of a prepared room with accessible art materials the allowing freedom and respect for the child to self initiate and direct through activities. This key learning factor was supported from theory to practice by providing work spaces in a communal area thus offering freedom for the child to chose their own activity and be aware of their social behaviour. The classroom construction in practice had three tables in two rows with a few chairs at each so dividing the room into certain areas of learning supporting the key objective of learning. The surrounding walls in the prepared environment with low shelves and all didactic materials easily accessible and labelled provided further support for this objective. The structure of the art space and the objective of the art exercise supported the learning outcomes of : motor education through the prepared environment, training the hand to write through tracing, and learning colours to refine definitions and judgements. Art and tracing are seen as indirect learning with a focus on pre-writing skills and were presented in

practice as detailed in theory with the appropriate materials set out for ready accessibility. In practice it was observed that choice tracing was more actively used by the children whereas the prepared easel and other free art materials were not used at any stage during the pre-school observation. Clarification at interview confirmed that the children were in the habit of choosing work at the easel and other free art materials at other times but less so than the tracing activity. The children were led into the tracing activity and purposive value for the activity was transferred in the process whereas this cannot be said of work at the easel and choosing other free art materials. Montessori theory does not prescribe that group art activities should be solely event or theme based with a product orientated objective however this was what was largely observed in practice. It was noted by the research that Montessori theory focuses more on individual development than co-operative or group aspects. The two exceptions to this were the use of colour boxes and the use of the artist's folder. With regard to the colour box activity the older children helped the younger children occasionally however in all other aspects of the activity the children worked as individuals. The objective of the artist folder exercise was to interest children in how paintings are constructed, engage them in lively discussion about the paintings in general and observe and define colours. This was followed through in practice and did move the children's communication briefly into the higher social domain so further supporting the realisation of theory in practice. Overall the facilitation was as prescribed in the literature. The facilitator did step back to observe in line with the theory during group art. The directive facilitation of art leads to emphasis on technical skill development and fine motor skills. However imagination and creativity are stated within theory as important in Montessori. 'the superior work of the schools' and of children 'is ultimately creative and is helped by the imagination' states Buckenmeyer (1997, p51) In practice art in Montessori was not observed as being treated as a consequence in itself but was employed in the other objectives of Montessori theory such as pre-writing, pre-maths and technical skill development.

5.6.4 HighScope system- Key points of theory to practice within the art experience

The aim of the environment in HighScope is to provide adult-child interaction thus sharing control through discussion in the 'plan-do-review' process. In practice, the HighScope room is partitioned into four sections with a prepared art space in one corner thereby supporting the recommendations of the HighScope curriculum. Free art time is placed as an option for the children in their 'plan-do' daily routine and this theory is followed through in practice by providing this structure. The environment in the classroom observed supported the theory of providing an area rich with art materials to develop exploration of the children's senses through sight, sound, touch, taste and smell. The art area included a table with four chairs, an open unit with all painting, drawing materials labelled thereby making the materials accessible and supporting a core HighScope curriculum principle. The walls in the observed room had art displayed with either individual, group art or project work reflecting the theme or season of the month. Art is one of the main curriculum areas with drawing and painting as two of its important elements. HighScope supports art for its own merit. This was carried through in practice. HighScope theory is based on the belief that art will help develop: social and emotional, cognitive and perceptual, linguistic, and physical skills and supports art education for its own merit (Vogel, 2001; Epstein & Trimis, 2002; Hohmann & Weikart, 2002, 2008). As discussed previously these developmental areas were supported in practice in their group and free art projects.

The facilitation through observation and empathy from theory was put into practice in free art time which offers the child inventive use of materials, creative space for thinking and expression through art practice. The theory prescribes the best facilitation for the development of; perception, memory and concept formation in order to support creativity. In free art this was supported by letting the child explore without an adult designed product. HighScope theory places great emphasis within group art on exploration and investigation and the collaborative and cooperative and social and emotional aspects of development. In practice the facilitator's attempts to support this through guidance of a theme development and investigating fully with the children during an art experience. Their social and emotional learning outcomes were seen to be developed through giving the children full responsibility of the materials to

share in free art time and care and tidy up using team work. Valuing the children's art is positively supported in practice through adult praise, the provision of group art wall display, own art wall display, art folders or taking art home. This pre-school system in both theory and practice seems to offer the children the most reflective time at looking at theirs and others art.

5.6.5 Practical achievements of theoretic goals and the impact of theory to practice issues

Differences of theory to practice were heavily noted with regard to some pre-schools whereas with other pre-schools differences were hardly noted at all. This was despite the fact that the pre-school observation was carried out in two separate classes in different schools for each system. In consequence the analysis of the achievement of theoretic goals and the impact of theory to practice issues can only be viewed as what can go wrong when differences are noted and may not be used as a model for the general situation in childcare practice. Similarly not all evidence of conflict between theory and practice are as simple as including or omitting aspects of theory, differences in the pre-schools theory to practice were often more a matter of emphasis or limitation. The main impact of the practical achievements of theoretical goals was the overall limitation of expressive, explorative and imaginative elements of creative development. This was often due to the facilitator's responsibility in controlling a large group and using a product based objective of the art exercise to meet educational expectations. The information gained at interview added to this by shedding light on the fact that the children wanted something to bring home. On the personal level of the facilitator it also appeared to be the facilitators own view, experience or perceived ability in art that was the factor which limited the creative learning elements from theory to practice. Quite a number of the interviewees mentioned that they were not comfortable in the art environment or didn't feel knowledgeable about art. Other factors which limited the creative process through art appeared to be outside pressures coming from the family with regard to the messy aspect of the materials themselves. The factors which reduced development within expressive, explorative and imaginative elements of creative development were the access and use of materials to experiment and explore and the provision of space for self expression. Even if art

materials are accessible, so supporting theory to practice, this was not enough to promote their explorative use or the use in the provision of space for self expression. The role of the facilitator needs to encourage and show they value the art experience offered for the child to actively engage meaningfully in the art process. What is very surprising within the findings was how little all the pre-schools actively encouraged this sensory aspect of learning while much is written about it in their theory. Broadly speaking, the pre-school systems observed follow through from theory to practice in cognitive, social and technical skill development through the use of art materials. The following is a breakdown of the theory to practice issues raised in observation as outlined in the sections above.

Mainstream practice individual scope for expression was observed to be almost limited to the use of the materials. This was a result of a strong objective of the art exercise that was nearly always product based and facilitated in a hands-on approach that emphasised technical skill development. The focus on the end product was seen to adversely affect; Inventiveness since the end product was pre-set; and self expression by limiting the child s imagination and creativity in general. It was also noted that due to the hands on approach taken in practice the facilitator did not step back out of the direct art space at any stage and was very present at all times in the children's space.

The observation of Montessori raised questions about freedom and choice within the art activity. If the child is constantly given choice of their own activities they will choose some and neglect others this could impact on their creative development. The facilitator by leading in an activity can transfer purposive value to the activity itself and this influences the child's evaluation when comparing activities that are not lead in by the facilitator. Thus the facilitator must be careful not to bias the children in favour of activities that involve technical abilities and against more freely creative activities. Also noted in the observation was that in group activities theme development should play an important role and not be limited by use only on occasions or seasonally.

Within the Steiner Waldorf and HighScope pre-schools the observed practice was largely in line with the theory. This does not mean that the practices of these pre-schools are above critique. As mentioned above, all of the pre-school systems observed follow through to a large extent from theory to practice in cognitive, perceptual and technical skill development through the use of art materials. The relationship that holds between the value a pre-school method has for these areas of development and the value they have for art and creativity is subtle. A pre-school theory can attribute great value to art and creativity in theory and yet this can be lost in the practice by too much focus on skill development. Creativity can thus be damaged by the use of art as a vehicle for other areas of development. While this is obviously applicable to Mainstream practice it can also be applied to the other three pre-school systems to various extents. Similarly a facilitative emphasis on individual or co-operative development that is not prescribed in theory can leave the corresponding area of development unsupported.

5.7 Support for children's creative development

5.7.1 The impact of the Mainstream art curricular approach on children's creative development in the pre-school years

5.7.1.1 Environment

First impressions on entering Mainstream pre-school environments are that they are not structured through their theory to the same extent as the other pre-schools. This has benefits in the sense that the overall eclectic nature is good for the artistic development of the children. All the prescriptive elements from the theory are present but structure does not play an important role in the layout of the areas of provision. So many of the benefits of a more structured approach as described in the literature review and elsewhere are lost to children at all developmental stages (Nutbrown, 2006). The exhibition of the children's work and theme development are the primary visual elements. In this way the use of art to develop creativity through ideas is well communicated to the children. Tables are used for group art activities and are

arranged around the walls with high, often inaccessible shelves or cupboards above them. These enclose a large inner space for other activities. As mentioned above areas of provision like sand pit and toy area are included but for the most part don't seem to be functionally related to their surroundings. Largely due to the enclosed and singular nature of the space all aspects of learning through art centre on group or shared projects. Perhaps as a reaction to this limitation Mainstream uniquely among the pre-schools tend to split the children into groups of higher and lower skills along developmental lines. This sharing of space, materials and conversation does support peer interaction and hence associated learning outcomes but its delivery when combined with the objective of the art exercise is ineffective (Lowenfeld & Brittian, 1987). Any benefits of splitting the group by allowing a more concentrated approach to the issue of how to facilitate to children who are at very different levels of development and social ability are similarly neutralised by the objective of the art exercise. As Chapman (1978) explains, to develop children's creative thinking and sensory learning the art experience must be offered through varying approaches and be appropriate to their age. The Mainstream environment, though rich in its areas of provision and demonstrative in its representation of art as valuable to creativity, is poorly structured and hence positioned to maximise the developmental and learning outcomes. Its objective of the art exercise is predominantly educationally based, producing a pre-designed end product such as greeting card, within the realms of art and crafts rather than an artistic/creative process. The creative elements seemed very restricted by the overall objective and more time to discover and share ideas in meaningful projects could be developed.

5.7.1.2 Facilitation

Mainstream offer a wider range of materials than the other pre-schools with the exception of HighScope, and this was seen by the research as providing greater freedom of expression to the children in order that they may have a larger base from which to expand on their creativity through exploration, discovery and sharing (Eglinton, 2003). The more developed children can improve their decision making skills in choosing appropriate media to the task and this is equal to any benefit gained from reducing the number of materials in order to aid specific judgement (Lowenfeld & Brittian, 1987; Bruce & Meggit, 2005). To enhance task persistence within group

activities, Mainstream facilitation ends an exercise by a specific time within the daily activities but like HighScope this is strongly supported by its inclusion in a weekly or monthly theme. Despite this, the freedom to creatively explore and experiment with a wider range of materials is limited due to the control of the facilitator, the directive facilitation of the objective of the art exercise and the product based finish. The facilitation is mainly led with a directive objective in order to monitor each child's ability and keep all the children at the same pace. The facilitator never steps out of the children's direct art space and this approach is too involved reducing the area for a creative response to the experience. Similarly by too much emphasis on supporting educational and technical skill development in the learning outcomes, creative use of imagination, with its collaborative, exploratory and experimental aspects alongside many associated social and problem solving skills is drastically reduced (Arnold, 2003; Bruce, 2004).

5.7.1.3 Child

The movements recorded in the art experience highlighted that while sharing space the children did not move into each other's personal space often. This was attributed to the rigidity of the facilitation in relation to a product based objective of the art exercise. The type of art movements mostly observed while painting were smearing and daubing offering good perceptual benefits by sensory and tactile exploration of the materials (Larkin, 1981). The children did display some slow and purposeful movements at times showing a deliberate individual thought process but this was sporadic as the activities were group based. Dialogue and group discussions increased in the sharing of materials providing discourse in identifying with others, the environment and their place in it which demonstrated the children expressing and communicating ideas. Other objectives in sharing space developed some self talk so voicing emotions and working through ideas while some detachment in group project seemed to support concentration skills. Despite this the scope of communication was poor for the children in the co-operative domain. Children in this domain need more access to decision making in the choice of the objective of the art exercise and co-operative exercises which do not involve sharing leadership as group problem solving is obstructive to their development (Chapman, 1978). This is reflected in both the qualitative and quantitative findings and theoretically supported in the view of

creative development from the literature review. The younger children should be assisted in learning by giving them the individual space appropriate to their social development. Whilst it did help the children's development to some extent when they were split into a separate group and the objective of the art exercise changed to suit their ability. The freedom to express needed in these early stages was not afforded them through a goal orientated product based process.

The Mainstream approach exhibits too much rigidity in the facilitation, the objective of the art exercise and the focus of learning to be of more than adequate use to children in the highly social domain and for the same reasons it largely fails in the co-operative domain. Similarly their choice of art exercise in being product based, and the poor delivery of space requirements for children in the lower social domains mean that any strengths they have in fostering creativity are negated to some extent.

5.7.2 The impact of the Steiner Waldorf art curricular approach on children's creative development in the pre-school years.

5.7.2.1 Environment

On entering the Steiner Waldorf pre-school classroom the impression is of a well thought out structured environment. The homely aspect of the use of a large table with individual places and the use of natural materials in the décor serve to reaffirm the place the child occupies in the natural and social order thus allowing the children to feel secure and reflect on such issues. Order plays an important role in Steiner Waldorf. The layout is very ordered and spacious with a view to being accessible and areas of provision are arranged with a view to both the child's social and emotional needs and the necessities of facilitation (Nutbrown, 2006). This includes areas for children to be alone and reflect if required. The art materials provided are specific to the Steiner Waldorf method and each has purpose with a specific intended use or application. This has a knock on affect in the objective of the art exercise since the exploratory use of materials is diminished by their functional definition. All objectives of the art exercise are socially based in order to support discussion and use

of product is aimed at understanding and developing 'purposeful steps'. However due to the limitations of the individual seating arrangements physical interaction during art is at a minimum. Art in Steiner Waldorf is an individual experience for the child and associated learning outcomes of group play are limited to verbal exchanges. This does not allow children to progress to the co-operative domain since leadership skills, sharing materials, group problem solving and other collaborative skills are not further developed. In keeping with the verbal nature of communication imaginative dialogue plays an important role in the objective of the art exercise which develops the children's explorative and inventive side (Eisner& Ecker, 1966). Morality holds a strong place here too, the children's pictures are not hung on out of concern the child might feel judged. Whilst this is highly ethical, it is not productive since children can gain confidence from such display and giving the child a choice would suffice. Reverence for materials and their correct use is also highly stressed. This, combined with the prevention of physical movement or interaction due to the seating arrangements during the art experience, places too much emphasis on highly social developmental skills and rigid methodology for children in the lower social domains who are more organically motivated to maximise the creative benefit.

5.7.2.2 Facilitation

Facilitation in the Steiner Waldorf art experience is also well thought out. The facilitator will sometimes sit with the child, thus sharing their purpose, and at times remove themselves completely from the space in order to give the children free reign in expression. The facilitator will often sing to the child which is beneficial to them in connecting music with art. However, the singing is typically used to communicate directive comments and the intention of the facilitator is to teach a set method through a series of steps by encouraging imitation in the child. Through the various methods outlined in Section 5.4 the facilitation is primarily geared towards the child's perceptual, technical and cognitive skills, while still supporting expressive and artistic, and social and emotional developmental outcomes. The environment and the objective of the art exercise play a strong role in this by effectively making some aspects of group activities impossible during the art exercise. Materials are strictly controlled during art time and facilitated by associating each with a specific purpose or method. Reverence for the materials and hence the methodology is also underlined.

Steiner Waldorf pre-school children show objective behaviours concentrated in the highly social domain. The limitations of the environment structure, the objective of the art exercise and the facilitative method mean that the children are only given a certain way to express themselves in the verbal discussions and fantasy based narratives that arise during the experience. Freedom of movement for the child is effectively their right to stop at anytime and wait till the activity ends. Reinforcement in Steiner Waldorf is achieved through weekly repetition and elements of order within the environment. The same thing happens on each Monday and so on. Theme development is not used in the Steiner Waldorf art practice; however previous to the art experience reflection through stories or poems referring to nature and colour is encouraged. Despite all these negatives Steiner Waldorf produce a well rounded if educative approach within their pre-schools. Steiner Waldorf methods through encouraging perceptual cognitive, expressive and artistic, and technical skills show them doing very well in figure1 in the findings chapter where they dominate the field in expressive and artistic and perceptual and cognitive and are above average in both of the other categories. They are extremely strong on self expression and this should translate into excellent social skills. However, the subtle way in which the environmental and facilitative aspects direct the opportunities for further communication and collaboration mean that the facilitation is geared toward children in the highly social domain and little room for children moving out of or into this developmental stage is accommodated.

5.7.2.3 Child

The type of art and movement the children in the Steiner Waldorf group displayed were varied. As they drew or painted they would identify objects and people that they represented themselves, or appeared to them through the mixing of the colours. They would use self talk, group discussion or child to child conversations showing they were responding to experiences and expressing emotions. They used smearing and daubing actions to explore and experiment while some movements were slow and purposeful indicating cognitive activity. At times the children paused with the brush before painting displaying a thoughtful process and applying problem solving skills or creative thinking to present their emotions and express their ideas. The dialogue in their group discussion was centred on their looking, discussing and analysing theirs

and the group's pictures. This led to discourse thereby developing interactive relationships and progressing peer identification and their place in the environment. The decoding of symbols or shapes appearing in their pictures appeared to engage a deeper understanding, creative thinking and further building of their knowledge. The children used self talk in a way which seemed to engage the child more with their own picture as a statement of action or sharing a sense of struggling (Dyson, 1989). The less adult communication offered to the children, the more imaginative dialogue between themselves and a collaboration of their own ideas expressed individually increased.

5.7.3 The impact of the Montessori art curricular approach on children's creative development in the pre-school years'.

5.7.3.1 Environment

The Montessori environment like Steiner Waldorf is based heavily in the theory. The first impression one gets when entering is how classroom like the layout is with rows of small tables and chairs for the children. Areas of provision are like Mainstream and some aspects of HighScope thereby arranged around the walls in shelves. Small rugs are provided in a corner where the children can play in their own space and these can be used for the children during self directed art activity. Similarly an easel is also provided in the corner of the room where the children can work with their back to the class. In this way the child can develop their emotional skills by stepping away from their peers and presenting their work to them but by having their back to them during the exercise they have elements of security (Matthews, 1999). All materials and areas of provision within the space are Montessori specific and much influenced by the directive objective of the art exercise that exemplifies the Montessori educational approach. An example of this would be that there is no sandbox for the children to explore and experiment but jars of sand to be used within certain predefined activities. Like Steiner Waldorf order and structure play an important role in the Montessori Method with much emphasis on everything being put in its proper place. Ordering influence was seen to extend to the use of colour which is provided through a series of

boxes that are broken down into further subdivisions in an almost scientific way. The art folder is used in order to show the children examples of how art is made, it is educational and does offer the children the opportunity to express themselves and fantasise through group discussion. The scope of this objective of the art exercise was seen as limiting for the children and its first objective was again to educate. Most objectives of the art exercise offered to the children in a group projects were designed to educate with a product based finish and a technical skill element. Group art was practiced sporadically and theme development within this centred on events or occasions. All of the other activities within the realm of art were in individual space. There is space and opportunity for individual and spontaneous art in an individual area which should offer most of the elements of creative development. While sharing many of the developmental objectives of Steiner Waldorf pre-school in its provision the Montessori environment allows for far more individual space for the children and its emphasis seems to be on personal as opposed to social development.

5.7.3.2 Facilitation

Art materials in Montessori classroom like Steiner Waldorf are adult controlled with little peer sharing and the art work area offers more adult control and less peer interaction. When children were being taught different colours and tones its educational learning outcome was the main focus of the facilitator. For task persistence the children can paint and create crafts or product over two days until finished. The facilitator leads with a directive tone, instructions and then will step away to offer the child space for concentration and adult observation. The provision of space and materials should provide more creative development but with the main use of paper and colouring pencils being focused on geometrical tracing the educational and technical skill aspects lead. The Montessori facilitation uses strong direction sporadically and concentrates on individual development as opposed to development within more complex social activities. Great emphasis is placed on the facilitator knowing the individual developmental stage of each child, and the children are given more time to self direct and orient themselves within the space toward their peers. Daily activities are consequently more random. All of the latter elements show the Montessori method is geared more toward children in the lower social domains who are not highly socialised and use art time to work through their *organic* aspects

of motivation. For this reason the emphasis on technical skill and pre-scientific objects seems to clash with the child's need to develop towards independence through self expression. This contradiction in the Montessori method was can be interpreted as a result of the overall objective being educative with skill development as its aim, and the lack of value placed on art as a creative exercise in itself.

5.7.3.3 Child

The art content through drawing mostly recorded in Montessori were geometrical shapes and straight lines highlighting an educational content. The children in Montessori can appear detached while tracing and thus dialogue and peer interaction was limited by the objective. When using the artist folder the children develop group discussion led by the facilitator so developing listening skills. There is the facilitation of some peer interaction through expressing one's own ideas and emotions through their likes and dislikes of paintings. The group art has little discussion and more focus is devoted to action and production. When a child goes to the easel to paint they become detached due to having their back turned to the group and being separated from them spatially. The children do not seem to use collaboration, communication and imagination through any of the free art or adult directed art experience. As stated in the above section on the facilitation, through all of these aspects the children at earlier stages of development stand to benefit whereas the more advanced would find this practice limiting.

5.7.4 The impact of the HighScope art curricular approach on children's creative development in the pre-school years'

5.7.4.1 Environment

On entering the HighScope environment one is immediately struck by the division of the space into areas of provision. The HighScope environment is highly structured and accessibility of materials is prioritised. The range and scope of materials and activities available to the children is far more eclectic and second to none of the pre-school environments. Similarly to Montessori there are a large number of tables but

these are arranged according to function within areas of provision. Themed development is in evidence everywhere on the walls alongside the personal and group art exhibits. HighScopes objective of the art exercise provides an equal balance of spontaneous, educational, product (craft) and group projects. The children are given some aspects of control over the objective of the art exercise by their involvement in an even handed approach and through the 'plan-do-review' process. The permanent communal space provided for spontaneous and free art contributes to the elements needed for creative development such as exploration and experiment by the access to materials available and the opportunity it offers for their free use in imaginative and inventive exercises (Eisner&Ecker, 1966; Lowenfeld & Brittain, 1987; Eglinton, 2003). As this is communal space and hence often shared the children can express and communicate ideas while responding to experiences and thus benefit from the associated linguistic, cognitive and social learning outcomes (Pringle, 2000).

The overall structure for group projects and product art is in a shared space offering peer interaction and learning through sharing of ideas and technical skill development.

5.7.4.2 Facilitation

Access to materials is controlled during group projects. A wide range is provided similar to Mainstream but in free art all materials are accessible to the child. This develops creative thinking through their usage and supports problem solving as the nature of the activity involves the children making their own decisions. This also gives the children the opportunity to express ideas and emotions and thus overcome obstacles to give form to expression (Eglinton, 2003; Epstein & Trimis, 2002, 2009). The development of a monthly theme is routine and again similarly to Mainstream, it is produced during group art time. Task persistence can be pursued over a couple of days or until child or adult feels the picture or project is complete. The facilitation in both free art and group art varies. The facilitator leads with guidance in group art, fully engaging themselves in encouraging the child to investigate through theme development, while being empathetic and removed in free art. This approach was not seen as clearly in the other pre-schools and is valuable in the sense that it greatly benefits the children in the lower social domains by offering uninhibited freedom to express themselves without demanding higher social engagement. Similarly it allowed the children in the higher social domains to act collaboratively, sharing leadership and

other developmental outcomes. The guidance used in the group projects is delivered to help children investigate and some direction is used when technical skill and construction is required. With less adult direction, material control and input into the child's physical space, increase personal creative development was observed. The value shown to the art through the role of facilitator is varied from group and personal wall display, own folder and products being taken home so offering children self reflection, peer learning and the freedom and confidence to display and express their own ideas. As mentioned elsewhere in this question the use of wall display can give children the opportunity for self reflection and has many benefits to emotional development through its performance and exhibitive elements (Dyson, 1989). In HighScope this practice is further embellished by giving each child their own art space on the walls. However, the child should be given choice as to what degree of performance, competition or exhibition they wish to partake in.

5.7.4.3 Child

The type of art movements expressed by children in both free art and group art time were smearing and daubing during the exploration and experimenting with the texture of the art materials. The children in HighScope seem to confidently step into each other's personal space and work on and in someone else's paint space both in free art and group art. This appeared to increase the intensity of the experience through the communicating of ideas and collaboration. Dialogue was varied between different art experiences due to the structure, the objective of the art exercise and adult influence. Peer leadership in free art time was observed showing collaboration, discrimination and using creative and higher levels of thinking. Group dialogue was seen to increase while sharing materials, space and ideas. The communication, creativity and imagination between children increased when the dialogue and use of space was mostly child to child or group with less adult in their intervention.

5.8 Conclusion of analysis and discussion

The introduction to this chapter followed the path of this research through the development of its ideas from their prehistoric origins in *organic and geometrically*

motivated art through the innate processes used by the child in manipulating symbols, and the questions raised by the creative and developmental theorists with respect to the value we place on art and creativity at various stages of child development. In doing so it outlined the steps already taken in order to achieve the required perspective to answer questions about the value of creativity, its benefit to pre-school children, the ensuing skills developed, the best practice with regard to the environment and facilitation, the assessment of theory to practice issues and hence the impact of each pre-school on creative development. The answer to these questions is not surprisingly complex as small differences in the way a pre-school prioritises developmental objectives for children in differing developmental stages will have a knock on effect in lessening its priority in other areas. This is also evident in the movement from theory to practice since again the facilitators personal values and priorities, constraints from the environment, class sizes, age range and even requirements from the parents can influence what the "best" practice will be. This chapter has concentrated therefore, on the data collected through the various means from the primary research, with the literature review as background theory in order to present a reasoned analysis of these questions. Due to the complexity of the subject matter it would therefore do it an injustice to present it in synopsis form in this conclusion. The following chapter will present this information in detail alongside the recommendations resulting from the research.

Chapter 6.

Conclusion

6.1 Original purpose of research

The purpose of this research was to evaluate the impact of preschool art on creative development and supporting skills by an analysis of the methodologies of preschool art education within Mainstream, Steiner Waldorf, Montessori and HighScope. The primary research was comprised of, observation of each preschool doctrine in practice, and the construction of art workshops within each preschool system. By studying art in the early years and the impact of art on creative development, through observation in each preschool, art time in practice was recorded. In conjunction with the secondary research this was later analysed to appraise how creative development through art is directly affected by the child's environment and facilitation. The secondary research proceeded by studying the ethos that underpins each preschool's provision of art in the published literature and material. By these methods, identifying their beliefs in art, comparing and critiquing how they view the adults' role as facilitator, and locating where they place the child in the art experience. Studies by creative theorists and educationists were also reviewed in order to gain a broader understanding of creative development. Both the primary and secondary research aimed at evaluating and where possible, quantifying the impact each preschool's art time has on creative development and its supporting skills. By reference to both, the theories of the different schools, and the secondary literature, it was possible to develop a picture of each preschools strengths and weaknesses. This in turn was analysed yielding a recommendation for the optimum provision of environment and facilitation with which to encourage creative development through art.

6.2 Research Methods

This research was pursued using the anti-positivism paradigm which added depth, insight and understanding of those being observed by appreciating that each individuals view is multi-layered and this must be understood through perception and explanation. In creating the observation tool, the literature review was used to identify the assessable areas and the factors which influenced the child. These were perceptual and cognitive, social and emotional, technical, expressive and artistic. Each of these areas was subcategorised in accordance with Eglinton's (2005) assessable areas in art. The observation tool was used within the observation of preschool practice to quantitatively assess each for later comparison with theory. This was part of a strategy that aimed at a fuller understanding of the finer nuances of each facilitative method and the limitations and constraints placed on its practice by theory, curriculum, and environment. By employment of ethnography within the ethnomethodological school, the method of participant observation was implemented during the primary research. In using participant observation in the observation phase it was possible to view the art experience from the perspectives of child, facilitator and the external observer. These more narrow categories lent to the utilization of short term observation method which focused on just the art experience within the pre-school setting. The information gained from the interviews by informants and its further use to construct the questionnaires allowed evaluation of the limitations of theory to practice. This was further elucidated by getting their personal view on art, creative development and their understanding of arts impact. The experience and data gained were then used to inform the construction and practice of the art workshop action research phase with a view to creating the most accurate representation of each pre-schools practice possible. During the art workshop action research phase, the social play continuum was also used, to identify in action and language behavioural instances that signify developmental ability, thus highlighting social and emotional skills and representing the children's creative developmental readiness. The mixed method approach employed through qualitative and quantitative methods supported the triangulation of data analysis. The qualitative data recorded from observation of the facilitators and children during the art experience contextualised the quantitative findings to sustain and enrich the analysis. Hence presenting the 'who' and the 'why'

which lay behind the resultant objective behaviours. The mixed method approach of triangulation gave completion of all aspects of data collection for this conclusion.

6.3 Main findings raised by the research

6.3.1 The impact of pre-school art on creative development and further learning outcomes

The main aims of the literature review within this research were; to develop a basis of knowledge and understanding regarding the nurturing of creativity through art from the body of theory comprising of art teachers, psychologists, art critics and creative, developmental and educational theorists to inform the construction and observation of preschool practice; To philosophically underpin any subsequent evaluative judgements in the research by an in depth study with creativity as its subject matter; And to study each pre-schools formative influences, theory, and training priorities and systems as they apply to the art activity.

In practice the pursuit of each of these objectives had positive benefits on each other and this was also an objective in developing a rounded view from which to answer the research questions. In the philosophical underpinning, the art-work of prehistoric peoples in the creative act was studied. The resurgence of the *organic and geometric* modes through history were noted to highlight the fundamental nature of very basic modes of creativity and representation in human development and its link to the same basic modes in modern children. In the section on universal symbols in children's art Gallagher (2004), in agreement with many theorists established a basic *currency* of children's representations by asserting of children's spontaneous drawings that each child will explore through their own unique path but stays within a universal pattern, going on to say that the immediate environment is reflected in the expression of the child's subject matter which correlates to early man's drawings of humans and animals. Lowenfeld&Brittain (1987) consolidate this by arguing that the mode of universal representation is symbolic. All of the latter so far would allow an understanding of creativity and art in terms of its product. Due to its focus on creativity however, further research was needed on the motivations and processes of

child art in order to perform this research. The inner *process* of this activity was explained with reference to Piaget's (1929) breakdown of the minutia of cognitive activity. By its consistent reapplication, Piaget's process of assimilation, accommodation and the equilibration of the abovementioned symbols into schema breaks down development into consecutive steps which can be observed by objective behaviours. However this conspicuously describes *all* cognitive activity and as such can be used to underpin developmental theories that do not mention creativity at all.

The link between cognitive activity and creativity was first described in the literature review by Smolucha & Smolucha as the "collaboration of imagination and thinking concepts" (1986, p.4). Sheaffer (2005, pp.222-223) further explains this as "divergent thinking" which is a cognitive skill but different from general intelligence. From this it may be seen that the *originality* of creative thinking is stressed by all creative theorists. It was in studying the motivating forces for this originality that a link was seen between the motive forces of *organic and geometric* art as described by Read and the variety of creative responses included in child art at pre-school level. In the earlier stages of the development of children the ego is only forming and children's representations are more internally motivated, based on extremely simple symbol manipulation and not based at all on outward influences. Matthew (1999, p.61) explains "Attractors originate from muscular and sensorimotor responses to internal and external events" they "become interiorized to form conceptualizations" and guide the "child's interaction with the world". Artistic activity serves the function of co-ordinating their perceptions and movements, and expression is consequently more important than communication. A great deal has been written in the literature regarding the importance of the unadulterated aspect of children's representations at this stage and its importance to the development of the child, their developing sense of self esteem, mental wellbeing and stability. Lowenfeld & Brittain (1987) affirm that when children are given the opportunity to draw or paint they are provided with the basis for the development of self-concept. And Kellogg (1969) further supports by saying that art is a visual stipulation for the achievement of mental stability. From all of the latter it may be seen that in fostering the creative spark it must be brought through from the *organically* motivated pre-social stage to the more *geometrically* motivated and sophisticated group interactivity that defines the older child. Marzollo and Lloyd (1972) believed that creativity, which comes naturally to a child, must be

held onto as it is lost in our logical world. The limiting or thwarting factors for children's creative development in these early stages can therefore be described collectively as anything which prevents the child's natural expression of their innate creativity. Unsurprisingly this can involve any of the factors described within the research as detrimental. The environment in its provision of space for children in the associative stage to both separate themselves spatially and orient themselves physically through movement and experiment with arts exhibitive and non-verbal aspects ; The placement of art and its evaluation within the curriculum can affect the facilitation in the sense that the specific need to nurture creativity can be lost by facilitating art no differently than any other area of activity; The facilitation in general, by control of access to materials, space for movement, separation and orientation to their peers; The level of training, qualification and experience of the facilitator, and crucially their ability to judge of the developmental readiness of the child and any reservations preconceptions bias or prejudice they carry that may impact on their handling of the assessment or facilitation of the child's development; The class size and age range of the children, choice of objective of art exercise, level of choice given to the child, and even parental attitudes to the art activity by their influence can all to some extent obstruct or completely thwart children's creative development. As explained earlier by Kellogg (1969), for the most part adults do not operate in the area of artistic representation, so it is difficult for a child to take it seriously in terms of its importance within their own developmental aims. This means that creativity in art is something very fragile indeed.

From the latter it may be seen that the creativity of the child in the earlier stages of socialisation within a pre-school must face formidable obstacles in making the transition to expression and furthermore that these obstacles are often immediate to each representative act of creative expression. Children who are more *geometrically* motivated have different needs. Their more advanced socialisation means they are far more motivated by the necessities of group interaction. External factors such as the shared conceptual frameworks necessary to verbal communication and co-ordinated activity and the cognitive and technical skills necessary to participate begin to play a disproportionate role in their motivation. Children at this age need to further develop their ego and self esteem by practicing responsibility, sharing leadership, and being

given an element of control over the objectives in their activities. A corresponding list to the one above can thus be constructed that itemises the possible obstructive or thwarting influences on children with these utterly different developmental needs. The need for the facilitator to constantly assess and react to the children's developmental readiness in this regard therefore cannot be overstated. Furthermore any prescription for optimum environment or facilitation must take into account these limitations. In the pre-school setting, each art experience can impact and progress many aspects of creative development by active facilitation and the correct provision of creative space and materials (Lowenfeld & Brittain, 1987; Gardner, 1990; Eglinton, 2003). Thus in coming to the analysis of the research it was found that the first research question needed to be re-evaluated in terms of the potential benefit of art experience to children of differing developmental stages once facilitated for in the correct environment and constantly assessed. For this reason the potential aspect to learning outcomes for creative benefits was stressed in answering the first research question: What are the benefits of an art experience for pre-school children's creative development?

The second research question which focuses on the skills which support creative development, clarification was needed due to the tendency of adults to look upon a skill as something immediately recognisable from an adult perspective. The behaviours recognised as milestones on the way to develop social, emotional, cognitive, perceptual, artistic, expressive and technical skills were placed as the earliest, easily recognised, signs in the linear development of the child. The importance of socialising factors was mentioned in the first part of the question as part of a larger discussion of the more concrete skills that become attainable by the child by correctly provided and facilitated art time. Part two of the question analysed the pre-school needs of children in developing these skills as they progress through the social domains by using the data gathered on each pre-school for comparison. The third and fourth research questions relating to the environment and facilitation took the lists of obstructive and thwarting influences mentioned and apply them with regard to each preschool in an attempt to prescribe the optimum provision of environment and practice of facilitation but in doing so recognised many limitations to this approach. They emphasised the role of the facilitator, the need for constant development and the necessity of a deeper understanding of creativity as a formative,

executive, and protective influence on the whole preschool art experience. The fifth research question relating to how each pre-school realises its theoretic goals in practice was an opportunity to underline the difficulties of implementing in practice any idealised set of standards or methods. This showed the limitations of the research by highlighting that some schools were not represented as having theory to practice issues over the time observed. It largely supported the previously outlined position that creativity can be easily supplanted, hindered or blocked by too much reliance on art-like/craft activities which emphasise skills, control of access to space for group, individual or free art activity and inappropriate facilitation to children's developmental stages. In discussing some concrete examples of the pitfalls of nurturing creativity, it further underlined the difficulties in providing for children at all developmental stages in pre-schools, thus raising the question of the possibility of implementing any prescriptive theory. Hence it concluded that a deeper understanding of creativity was needed to be built into the systems in order for the creativity to be nurtured effectively. The final question in the research took each of the pre-schools and analysed them in the light of all that had been realised in the research. It developed on the conclusion of the fourth question by summarising each schools impact on creativity. Its intention was to present a balanced analysis of each preschools art practice on children's creative benefit in the pre-school years' and as such complete the object of the research. This centred on the two sets of data from the art workshops as triangulated with the data from the previous phase. The Mainstream pre-school environment was found to be comparatively poorly structured and did not provide space for children in the associative domain to maximise their creativity. Its objectives of exercise were too often based on a set end product and focused too much on educative elements and technical skills, and hence restricted the creative elements within the art experience. This pre-school showed good provision of materials and routine elements, and theme development was also good. The facilitation in constantly verbalising with the children and being very hands-on was considered appropriate to the developmental needs of the children in the social domain but nevertheless restrictive to creativity. This was seen as more of an issue as the children advanced into the highly social and co-operative domain. The Mainstream system does not provide free art or individual art time with their corresponding benefits to creativity and associated learning skills. The Steiner Waldorf pre-school environment

was well structured but lacked the provision of space within the art activity for children in the earlier social domains express themselves physically as the seating is individual. While routine elements were seen as well presented, theme development is poor. This preschool showed extremely high recordings of behaviour across the spectrum in learning through art in the workshop phase. This can be attributed to, the facilitation which is empathetic in its presentation, and the freedom the child has to express in terms of the object of exercise. However, the high scores in technical and perceptual show the underlying control in the presentation of the materials and its influence on the objective of art; thus high learning through art representation does not necessarily mean full freedom of expression. Due to the limitations of the seating almost all group activity is verbally based this meant correspondingly high levels of representation in expressive and artistic and social and emotional but was seen to be a limiting factor for the children in their advance from the highly social to the co-operative domain. The Steiner Waldorf preschool system was the only one in which the decoding of symbols formed part of the art exercise. It does not provide free art and hence its benefit to creativity and associated learning skills. The Montessori system provides a highly structured and ordered environment where materials are accessible but controlled with the exception of during free art. This emphasis on order was seen to extent to the presentation of colour through the colour boxes. Similarly, the materials provided are didactic and thus encompass a strong emphasis on perceptual and cognitive and technical skill. Space is provided for children in the lower social domains to express themselves individually and the facilitation is provided with strong direction and sporadically which also suits these children in the art activity. Routine aspects to the facilitation are the lowest of the preschools and theme development is also poorly provided, though task participation is good. From all of the latter it can be seen that in the Montessori system the emphasis is on individual associated learning through the art experience. Similarly, the system is geared toward optimal provision toward children in the lower social domains as the emphasis is not on higher social or group activity and its corresponding benefit to creativity and associated learning. The HighScope environment also provides a high level of structure with access to materials prioritised. Themed development is also good and the objectives of art are balanced in their provision between spontaneous free art, educational, product based and group activities. The uninhibited freedom to

express themselves is good for the children in the lower social domains but the emphasis on group activity elsewhere in the curriculum, use of space and from the facilitation tends to sideline these children's expressive needs and this can be seen in their poor representation in the lower domains of the social play continuum. At the opposite end of the social play continuum and for the same reasons, High/Scope is the only preschool to show substantial activity in the co-operative domain. It can be seen from all of the above that each of these pre-schools in providing its services are responding to a complex array of developmental needs from the child and expectations from their parents, peers and their soon-to-be teachers in the best way their differing curricula can prescribe. That said, the purpose of this research was to analyse their impact on *creative* development by specifically analysing how art is provided. With the limitations to practice firmly in mind it remains therefore to recommend how this should be done. It is hence the intention of this research to make its recommendations in terms of guidelines where possible with an emphasis on the overall need for a deeper understanding of creativity as divergent thinking and the importance of identifying the developmental readiness of each child and respond to their creative needs by the provision of art.

6.4 Recommendations

6.4.1 Key elements all pre-school art experiences should consider

A deeper understanding of both the motivation for creativity and the conditions necessary for it to flourish is vital to every stage in the provision of pre-school art. Art enables the child to move through the pre-linguistic and pre-social stages of development, and underpins their subsequent overall development through its representational and creative aspects. In line with this therefore, the place that art occupies within the pre-school curriculum should be central and fundamental. Similarly a deeper knowledge of how creativity is nurtured by art specifically should be included in the training objectives of potential facilitators. In the course of this research situations were observed where the facilitation was practiced in accordance with the theory, and the theory greatly valued art by placing it centrally in the

curriculum. Despite this, a tendency to facilitate according to one encompassing method instead of to the separate needs children at differing stages of creative development meant that obstacles to creative development were observed in practice that the facilitators were unaware of. Thus in parallel with a deeper knowledge of how creativity is nurtured by art, training should be closely associated with the facilitator's ability to identify the specific stages in the development of creativity and respond correctly to ensure that it is not obstructed. Care should also be taken that any reservations preconceptions bias or prejudice the facilitator may have that could impact on their handling of the assessment or facilitation of the child's creative development should be identified and managed. Similarly any influence of parental preconceptions with regard to the art activity should be identified. The benefits of creativity to their child should be explained and they should be reassured that while every effort is made to prevent their children coming home with paint on them their developmental needs are more important. This allows the facilitator to place more emphasis on free creativity as opposed to spotless children.

In preparation for providing art in a pre-school setting, key elements of art experience should be considered under the headings of environment and facilitation. The structure of the space and art exercise should provide for communal, shared and individual use; the feature of the table, chairs and work space provided should all be considered as they can increase or decrease sharing, and movement. Thus allowing for interactive dialogue, movement into each other's space, and sharing of information, materials and ideas. The scope of the objectives should be considered when planning the structure of the space whether they are spontaneous or free, group, educational or product based art experiences or combinations of the same. Similarly, the facilitation of art materials through their control, range accessibility and capacity for sharing, and the method of facilitation through the elements of control, empathy, guidance should be given close consideration. Observation and judgement in the role of facilitator is vital in order to strike the right balance between these methods. The elements for creative development and supporting skills that should be offered through the art experience and materials are; collaboration with peers, space for self expression, communicating and expressing ideas, exploration and experimenting through the senses, use of imagination and provision to respond creatively to experiences. The art

experience should always let the children develop at their own pace while developing their abilities.

6.4.2 Creative art experiences

For creativity to develop through an art experience the facilitator *must* have an awareness of the key elements within creative development and creative thinking. They need to appreciate how to offer the art tools and provision of space for creative development. One art experience can impact on numerous elements of creative development. A variety of art experiences should be offered within a routine for different elements of learning through creative development to be explored. A weekly structured routine should consist of daily timetables putting in place periods for free, individual and group art. The role of the facilitator should be to encourage, inspire and enthuse with the children thus engaging them through art experiences. Appropriate praise should be used but not to interrupt or to break the child's concentration. Care should be taken by the facilitator to first identify what they are praising through the child's interpretation as damage can be done by praising work that has negative associations for the child. Singing can be used to improve the child's perceptual development and broaden their bank of sensory stimuli, but should not be used to disguise instruction in case of negative associations. A visual show of the value of the children's art through a wall display can offer opportunities for peer interaction through discussion. The use of personal folders increases the child's capacity for reflection and self esteem. Similarly the provision of each child's own art displayed to express their imagination can also add value. The children should be encouraged to participate in this but in the end should be allowed their choice with regard to the display of their art. The children must be taught to make a habit of creativity in an art experience so the child can recall and recreate experiences through the various art mediums.

Through the understanding of art's impact on creative development the facilitator must be equally aware of what restricts it. The spatial separation or negative positioning of art materials from the children can inhibit or prevent their active usage. An ideal space should be in a highly visible common are that is accessible to all.

Similarly, a lack of active adult encouragement can prevent the child choosing to engage in the art space. If the facilitator removes the limitations of concerns over mess this will increase children's learning through exploration and experimenting. A further limit to creative development is constantly emphasising art production rather than process. Observation is vital for the role of the facilitator to actively lead the child forwards thus making connections in learning and delivering the elements for creative development. This will maximise creative freedom in the art experience and extend the factors of time and space for an art experience to develop over a few days.

6.4.2.1 Free/Spontaneous Art

All pre-school practices should provide free art time within their curricula. That does not mean that art should be an area of provision within the free play activities, nor does it mean that the child should be allowed free expression to paint within a statically seated group or individual activity. During the free art experience children should be given completely free access to a great variety of materials and media that stimulate perceptual and sensual exploration and imaginative and creative application. Music can be included in order to create perceptual connections for the children. Within limits care should be taken not to present the method of use or object of exercise in this activity as this restricts creativity. Space should be provided for the children to interact, share materials, engage in discovery and exploration engage in collaboration and co-operative activities, move and come into contact with each other. Provision of areas for the children to experiment with arts exhibitive and performance aspects is also valuable. The children should be allowed to enter into the art experience with no obstructions to their creativity brought in by excessive adult direction, restrictions due to technical use of materials or other means. No objective of exercise should be introduced. At all times the facilitator be removed from the art area when possible. Provision of some individual space should be made available for children to separate from their peers and express themselves on their own if possible. Children of all levels of development can benefit from the provision of this activity.

6.4.2.2 Group Art

Group art should be structured by the environment through the placement of a circular communal table, with a selection of chairs around it and space for movement between chairs and around the table. The group project should be meaning full for each child so making connections from previous learning's. The provision of materials should offer a wide range of art mediums which are easily accessible; facilitated through observation through stepping back and guidance through theme development and encouraging investigating with the children to support creative ideas. The constructed elements required for creative development and supporting skills should be encouraged through; freedom of space for; movement, imagination, accessibility to materials through; the engagement of discovery and investigation, using their senses for exploration and experimenting; collaborating with peers through the of sharing materials and space for stimulating interactive relationships, and nurturing social and emotional relationships thus promoting the use of higher levels of thinking.

The objective of the art exercise should be divided in accordance with the proportion of children at differing levels of social development and emotional development. The facilitator should encourage the formation of group activities by developing the challenges of shared objectives in an atmosphere of shared leadership when judged necessary, but otherwise step out to allow these early attempts at co-operative and coordinated activity to develop dynamically between the children. Children in these higher levels of social development should be led with less direction and care should be taken to vary the exercises to meet their developmental demands within the routine. Educational and product finishes are acceptable at this stage but as a comparatively smaller part of a larger routine. The facilitator should guide with empathy through these exercises and place a higher emphasis on procedural steps, assisting with technical skill development where necessary but then stepping back to allow expression. This time can be spent assessing the needs of the less socially advanced children. Children in the lower social domains should have a radically different objective of exercise during group art and ideally should not involve an emphasis on product or technical skills at all. These children should be facilitated with strong direction when needed and assisted with the development of basic technical

skills if necessary. Every attempt should be taken by the facilitator to step out of their art experience and allow imaginative expression.

6.4.2.3 Individual Art

All children need the space to separate themselves from their peers and indulge in self expression. By including individual art time in the curriculum it ensures that the act of separation offers the children more than just the right to leave another activity or the choice of solitude. It shows the child that this behaviour is valuable in its own right. Individual art provides an experience for the children during which the facilitator can devote more time for observation and the assessment of each child's specific needs in an atmosphere of quiet reflection. During this experience the facilitator can paint alongside the children or step out altogether, but still be in a position to respond to the children's developmental needs. It should be structured by the environment through the placement of a communal table with individual areas. The table should offer a selection of spacious individual art areas with chairs at each station so providing creative and emotional space therefore they can work through their ideas and emotions but also share with their peers if they want to. The provision of materials should offer a variety of pre- selected art mediums which are the same for all individual work areas. These should be limited to amount due to space available and ability of children; facilitated through observation, empathy and sometimes imitation offering discourse to support creative ideas. The constructed elements required for creative development and supporting skills should be encouraged through; freedom of space for collaboration with peers, space for self expression, communicating and expressing ideas, exploration and experimenting through the picture, use of imagination and provision to respond creatively to experiences.

6.5 Conclusion

When fulfilling the objectives of this research in response to the research questions it was found that each preschool systems value system, whether implicitly or explicitly, affects the provision of art through its environment, facilitation, and objective of exercise. Findings from learning through art in the second phase served to highlight

associated learning skills from each pre-schools art activity; Through the triangulation of data, these same findings were later used to identify where specific emphasis in the theory curriculum or facilitation might present issues for children in their creative development through the social domains. Thus there are areas of conflict and give and take between children's overall development and their creative development. The data through its analysis in this way can provide specific information about the situation in *these* workshops at *this* time and can even be used by triangulation with the data from the observation of preschools to make broader assertions about the methods of the pre-school systems, but in the pre-schools themselves the task is to consider the developmental benefits of creativity within child development in general and what specific needs children have that necessitate provision. In effect many of the environmental aspects are not negotiable for a practice without starting afresh, however much can be done in the provision of space and objective of exercise to maximise the creative of development of children through art. As mentioned group, free art and individual art should be provided and where possible both individual and communal space should be available to the children. Materials should be greatly varied and should not be controlled where possible and never in free art. The facilitation is crucial in the identification of the needs of children in making the transition across the domains of the social play continuum, and adjusting its delivery accordingly. Therefore a range of facilitative techniques should be evident in any practice. Finally, the objective of exercise in the art experience should where possible *be* creativity, whether it is the co-ordinated collaborative creativity of the geometrically motivated child in the cooperative domain or the creative early representation of the individual organically motivated child in the associative domain or any child anywhere between.

Bibliography

Abbott, L. Nutbrown, C. (2001) *Experiencing Reggio Emilia: Implications for Pre-School Provision.* Open University Press.

Aubrey, C. David, T. Godfrey, R. & Thompson, L. (2000) *Early Childhood Educational Research. Issues in methodology and ethics.* London, Routledge.

Arnold, C. (2003) *Observing Harry.* Berkshire, McGraw-Hill Education

Baker, T. L. (1994) *Doing Social Research.* 2nd ed. New York, McGraw-Hill.

Bamford, A. (2005) *Evaluating the Impact of Arts Education: The Key Issues.* UNESCO

Barnes, H. (1991) The Arts and practical Skills. *Education Leadership Magazine*, Vol. 49, No. 2, October, pp. 52-54.

Barrett, M.D. Bridson, A. (1983) The effect of instructions upon children's drawings. *British Journal of Developmental Psychology*, Vol.1, pp. 175-178.

Beaver, M. Brewster, J. Jones, P. Keene, A. Neaums, S. & Tallack, J. (1991) *Babies and Young Children Book 1: Early Years Development.* Stanley Thornes Ltd.

Beaver, M. Brewster, J. Jones, P. Keene, A. Neaums, S. & Tallack, J. (1999) *Babies and Young Children Book 2: Early Years Care and Education.* Stanley Thornes Ltd.

Beaver, M. Brewster, J. Green, S. Neaum, S. Sheppard, H. Tallack, J. & Walker, M. (2008) *Child Care and Education. CACHE Level 3.* UK, Nelson Thornes.

Belfield, C. Schweinhart, L. & Barnett, S.W. (2005) *Lifetime Effects: The High / Scope Perry Preschool Study Through Age 40.* High/Scope Press.

Bell, J. (1993) *Doing your research project: A guide for first-time researchers in Education and Social Science*. 2nd ed. Milton Keynes, Open University Press.

Blaikie, N. (1993) *Approaches to Social Enquiry*. Cambridge, Polity Press.

Bloor, M. Wood, F. (2006) *Keywords in Qualitative Methods. A Vocabulary of Research Concepts*. London, Sage.

Bremner, G. Slater, A. & Butterworth, G. (1997) *Infant Developments. Recent advances*. UK, Psychology Press.

Brittain, W. (1979) *Creativity, art and the Young Mind*. New York, MacMillian Publishing Company.

Broadhead, P. (2005) *Early Years Play and Learning. Developing Social Skills and Cooperation*. Oxon, RoutledgeFalmer.

Broadhead, P. (2006) Developing an understanding of young children's learning through play: the place of observation, interaction and reflection. *British Educational Research Journal* Vol. 32, No. 2, April 2006, pp. 191–207.

Bruce, T. (2004) *Cultivating Creativity in Babies, Toddlers and Young Children*. London, Hodder Arnold.

Bruce, T. (2005) *Time to Play in Early Childhood Education*. London, Hodder & Stoughton.

Bruin, D. Licthart, A. (2004) *Painting in Waldorf Education*. AWSNA

Bryman, A. (2004) *Social Research Methods*. 2nd ed. Oxford, University Press.

Buckenmeyer, R (1997) *The California lectures of Maria Montessori, 1915: Collected Speeches and Writings*. England, ABC-Clio Ltd.

Burke, C. (2005) *Creativity Action research Awards: A Critical Evaluation.* Leeds University.

Burrell, G. Morgan, G. (1981) *Sociological Paradigms and Organizational Analysis.* London, Heinemann.

Butler, I. (2002) A Code of Ethics for Social Work and Social Care Research. *British Journal of Social Work*, Vol.32, March , pp. 239-248.

Carle, E. (2002) *The Very Hungry Caterpillar.* England, Puffin Books.

Centre for Early Childhood Development and Education (2006), *Síolta, the National Quality Framework for Early Childhood Education,* Dublin: CECDE.

Chapman, L. H. (1987) *Approaches to Art in Education.* New York, Harcourt Brace Jovanovich, INC.

Cicourel, A. (1964) *Method and Measurement in Sociology.* New York, Free Press.

Claremont, C. (1984) *The Absorbent Mind, Maria Montessori.* India, Kalakshetra.

Clough, P. Nutbrown, C. (2007) *A student's guide to Methodology. Justifying Enquiry.* Sage, Publications London.

Coates, E. (2002) 'I forgot the sky'. *International Journal of Early Years Education*, Vol.10, No1, March, pp. 21-35.

Coates, E. Coates, A. (2006) Study of children talking and drawing. *International Journal of Early Years Education* Vol. 14, No. 3, October, p221-241

Cohen, L. Manion, L. & Morrison, K. (2007) *Research Methods in Education* . 6th ed. London, Routledge.

Cole, A. (1992) *Perspective – A Visual Guide to the Theory and Techniques*. London, Dorling Kindersley.

Conference of the European Association for Research in Learning and Instruction, Goteborg, 8th Biennial. 1999. Pang, M. (1999). Two faces of variation: On continuity in the phenomenographic movement.

Cooper, S. Fynes-Clinton, C. & Rowling, M. (2005) *The Children's Year. Seasonal crafts and clothes*. UK, Hawthorn Press.

Cooper, S. Fynes-Clinton, C. & Rowling, M. (2006) *All Year Round. Christian calendar of celebrations*. UK, Hawthorn Press.

Costello, J. (1972) *Maria Montessori. The Discovery of the Child*. New York, Ballantine Books.

Cox, M. (1992) *Children's Drawings*. London, Penguin Books.

Creswell, C. (1998) *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Sage, London.

Cullen, B. (1995) *Creating a Connection – An Exploration of the Contribution of Community Arts to Community Development in Five Local Projects*. Dublin, Combat Poverty Agency.

Dash, N.K. (1993) *Research Paradigms in Education: Towards a resolution.* 5th ed. London, Journal of Indian Education.

Department of Education and Science. (2004b Foreward) *Child Protection Guidelines and Procedures for Post-Primary Schools.* Minster For Children. Dept of Health and Childcare.

Department of Justice, Equality and Law Reform (1999) *National Childcare Strategy: Report of the Partnership 2000 Expert Working Group on Childcare Dublin.* The Stationary Office.

Donaldson, J. Scheffler, A. (1999) *The Gruffalo.* Oxford, MacMillan Children's Books.

Donaldson, J. Scheffler, A. (2007) *The Gruffalo, Activity Book.* Oxford, MacMillan Children's Books.

Donohoe, J. Gaynor, F. (2007) *Education and Care in the Early Years.* 3rd ed. Gill and McMillan.

Dyson, A.H. (1989) *Multiple worlds of child writers. Friends learning to write.* New York, Teachers College Press.

Edwards, C. Gandini, L. & Forman, G. (1993) *The Hundred Languages of Children. The Reggio Approach to Early Childhood Education.* Norwood New Jersey, Ablex.

Eglinton, K.A. (2003) *Art in the early years.* London. Routledge Falmer.

Eisner, E.W. Ecker, D. (1966) 'What *is art education?': Readings in Art Education.* Waltham, Blaisdell.

Ellis, C. Flaherty, M. (1992) *Investigating Subjectivity. Research on lived experience.* Sage.

Epstein, A,S. (2009) *Me, You, Us. Social-Emotional Learning in Preschool.* Ypsilanti, HighScope Press.

Epstein, A.S. Trimis, E. (2002) *Supporting Young Artists. The development of the visual arts in young children.* USA, HighScope Press.

Erickson, F. (1986) *Qualitative methods in research on teaching.* In M. Wittrock (Ed.), Handbook of research on teaching. Chicago, MacMillan.

Erickson, F. (1992) *Ethnographic microanalysis of interaction. In the handbook of qualiatative research in education.* (ed) M.D Le Compte, W.L. Millroy and J. pressle 201-25, San Diego, Academic Press.

Essa, E. Burnham, M. (2001). Childcare Quality: A model for examining relevant variables in the Early education and care, and reconceptualising play. *Advances in Early Education and Day Care.* Vol 11, eds. S. Riefel and M.H. Brown, pp. 59-113.

Feinstein, J.S. (2006) *The Nature of Creative Development.* California, Stanford Business Books.

Gallagher, M (2004) A Study of Spontaneous Drawings of Young Children; Implications for the Quality of the Learning Environment. IN: *'Questions of Quality' CECDE International Conference, 23-25 September, Dublin.* Gate Lodge, St. Patrick's College, Drumcondra, Dublin 9. pp.102-111.

Gardner, H. (1993) *Frames of mind – The Theory of Multiple Intelligences.* London, Fontana.

Gardner, H. (1980) *Artful Scribbles – The Significance of Children's Drawings.* New York, Basic Books.

Gardner, **H.** (1990) *Art Education and Human Development.* California, Getty Publications.

Gardner, **H.** (1982) *Art, mind and brain.* New York, Basic Books.

Garfinkel, **H.** (2002) *Ethnomethodology's Program.* New York, Rowman and Littlefield.

Garland, C. White, S. (1980) *Children and Day Nurseries*. London, Grant McIntyre.

Garson, D. (2008) *Ethnographic Research.* North Carolina State University, Public Administration.

Gibson, R. (1996) *The Usbourne book of Printing*. England, Usbourne Publishing Ltd.

Gibson, J.J. (1986) *The ecological approach to visual perception.* Hilldale, NJ, Lawrence Erlbaum.

Gilbert, N. (1993) *Researching Social Life.* London, Sage.

Golomb, C. (1992) *The Child's Creation of a Pictorial World.* Berkly, CA, University of California Press.

Graham, J. Grewal, I. & Lewis, J. (2007) Ethics in Social research: The views of research participants. *Government Social Research Unit.* P6124. Febuary 2007, pp.1-54.

Greenwich, C. (1998) *The hundred languages of children: the Reggio Emilia approach – advanced reflections*. Ablex Pub. Corp.

Greige, A. Taylor, J. (2004) *Doing Research with Children.* London, Sage.

Griebel, W. Niesel, R. (1999) From Kindergarten to school: A transition for the family. *European Conference on Quality in Early Childhood Education "Quality in Early Childhood Education* - How Does Early Education Lead to Life-Long Learning?" 1-4 September. Helsinki, Finland. pp.-1-16

Grunelius, E. M. (1996) *Early Childhood Education and the Waldorf School plan.* Waldorf Curriculum Series. Rudolf Steiner College Press.

Harding, J. Meldon-Smith, L. (2006) *How to make observations & assessments*. 2nd ed. Oxon, Hodder & Sloughton.

Hawksley, L. Cunningham, A. Payne, L. & Bradbury, K. (2001) *Essential History of Art*. Bath, Parragon.

Hays, N. Kernan, M. (2003) *Transformations. The Theory and Practice in Early Education*. University College Cork.

Hohmann, M. (1997) *A Study Guide to Educating Young Children: Exercises for Adult Learner*. High/Scope Press

Hohmann, M. Weikart, D.P. (2002) *Educating Young Children: Active Learning Practices for Pre-School and Childcare Programs*. 2nd ed. Michigan, HighScope Press.

Hohmann, M. (2008) *Educating Young Children: Active Learning Practices for Pre-School and Childcare Programs*. 3rd ed. Michigan, HighScope Press.

Hopperstad, M. (2008) Relationships between children's drawings and accompanying peer interaction in teacher-initiated drawing sessions. *International Journal of Early Years Education*, Vol 16,No.2, June 2008 , pp.133 – 150.

Iannaccone, C (2001) History, Humanity and Handwork. *International Journal of Early Years Education*, Vol 16, No.2 Renewal Fall/Winter issue, pp.133-150.

Information pack for *Pre-School Service Providers* (2007) Border Counties Childcare Network. Monaghan

Johnson, A. G. (2000) *The Blackwell Dictionary of Sociology*. 2nd ed. Wiley-Blackwell.

Johnston, R. B. Onwuegebuzie, A J. (2004). *Educational Researcher,* Vol 33. No.7.1st October, pp.14-26.

Junemann, M. Weitmann, F. (2006) *Drawing and Painting in Rudolf Steiner Schools.* Hawthorn Press.

Kahn, D. (1995). *What Is Montessori Elementary?* Cleveland, OH: NAMTA. Southern Illinois University Press

Kiernan, G. (2003) The Best for Children. IN: *NCNA Conference-* Developing Quality Standards for Early Childhood Care and Education in Ireland. 10-11th May 2003, Dublin. National Children's Office.

Kellogg, R. (1969) *Analyzing Children's Art.* Palo Alto, California National Press Books.

Kellogg, R. (1979) *Children's Drawings, Children's Minds.* New York, Avon Books.

Kess, G. (1997). *Before writing: Rethinking the paths to literacy.* London, Routledge.

Kess, G. (2003) *Literacy in the new media age.* London, Routledge.

Key, J.P. (1997) Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, Vol.45, No, 3, pp. 214-222.

Kor, E.M. (1992) *'Nazi experiements as viewed by a survivor of Mengele's experiments.'* In A.L Caplan, (ed.), When Medicine Went Mad: Bioethics and the Holocaust. Totowa, NJ, Humana Press.

Kramer, R. (1976). *Maria Montessori: A Biography.* New York, Putnam's.

Larkin, D. (1981) *Art Learning and Teaching.* Ireland, Wolfhound Press.

Lievegood, B. (2005) *Phases of Childhood* – Edinburgh, British Library CIP.

Lillard, P. (1996) *Montessori Today.* New York, Random House.

Lillard, P. Jessen, L. (2003) *Montessori from the Start.* New York, Schocken.

Lincoln, Y. S. Guba, E. G. (1985) *Naturalistic Inquiry.* Beverly Hills, Sage.

Lowenfeld, V. (1947) *Creative and Mental Growth.* Macmillan Publishing Company.

Lowenfeld, V. Brittian, L. (1987) *Creative and Mental Growth.* 8th ed. New Jersey, Prentice-Hall.

Luquet, G.H. (2001) *Children's Drawings [Le Dessin Enfantin]* Translated by Alan Costall. New York, Free Association Books.

Mac Naughton. G. Rolfe, S. A. & Siraj-Blatchford I. (2005) *Doing Early Childhood Research.* Open University Press.

Marton, F. (1981) Phenomenography - describing conceptions of the world around us. *Instructional Science,* Vol,10, 1981, pp.177-200.

Matthews, J. (1999) *The Art of Childhood and Adolescence – The Construction of Meaning.* London, Falmer Press.

Matthews, J. (2003) *Drawing and Painting –Children and Visual Representation.* 2nd ed Edition. Paul Chapman, Educational Publishing.

May, T. (2001) *Social Research: issues, methods and process.* 3rd ed. Buckingham, Open University Press.

Meggitt, C. Sunderland, G. (2000) *Child Development an Illustrated Guide.* Oxford, Heineman Educational Publishers.

Merton, R.K. Kendall, P.L. (1986) 'The focused interview'. *American Journal of Sociology*, Vol 51, No 6, pp.541-57.

Montessori, M. (2003) *Basic Ideas of Montessori's Educational Theory. Extracts From Maria Montessori's Writings and Teachings*. Oxford, Clio Press.

Montessori, M. (1948) *To Educate the Human Potential.* Madras, India. Kalakshetra Publications.

Montessori, M. (1949) *The Absorbent Mind.* Madras, India. Theosophical Publishing House.

Montessori, M. (1956) *The Child in the Family.* Chicago, Henry Regnery.

Montessori, M. (1973) *From Childhood to Adolescence.* New York, Schocken.

Montessori, M. (1917) *The Advanced Montessori Method* (Vol. 1: *Spontaneous Activity in Education;* Vol. 2: *The Montessori Elementary Material*). New York, Frederick A. Stokes & Co.

Montessori, M. (1936) *The Secret of Childhood.* New York, Frederick A. Stokes and Co.

Montessori, M. (1955). *The Formation of Man.* (first published in the U.S. under the title *Childhood Education,* New York: New American Library.)

Montessori, M. Jr. (1977) *Education for Human Development: Understanding Montessori.* New York: Schocken Books.

Montessori, M. Jr. (1997) *Education For Human Development: Understanding Montessori.* England, ABC-Clio Ltd.

Mooney, A. Cameron, C. Candappa, M. McQuail, S. Moss, P.& Petnie, P. (2003) *Early Years and Childhood International Evidence Project: Quality*. London, Dept of Education and Skills.

Muller, B. (2004) *Painting with children*. Edinburgh, Floris Books.

Mussen, P. Conger, J. Kagan, J. & Huston, C. (1999) *Child Development and Personality*. 7th ed. Harper Collins.

National Children's Nursery Association (2007) *In-service Training Prospectus*, Dublin.

National Council for Curriculum and Assessment (2008) *The framework for early learning*. Key messages from the background papers. November 2008.

Ni Mhurchu, N. (2003) *Children's Early Representations: Reflections of Creativity*. University College Cork.

Nutbrown, C. (2006) *Threads of Thinking. Young Children Learning and the Role of Early Education*. 3rd ed. London, Sage.

Nutbrown, C. Hannon, P. & Morgan, A. (2005) *Early Literacy Work With Families: Policy, Practice and Research*. London, Sage.

Nutbrown, C. Jones, H. (2006) *Daring Discoveries – Arts Based Learning in the Early Years*. Darts, Doncaster Community Arts.

OECD, (2005) *Starting Strong 11: Early Childhood Education and Care*. Organisation for Economic Cooperation and Development.

O'Leary, S. C. (2001) *Busy Fingers Autumn. Art and craft ideas*. The O'Brien Press Ltd. Dublin.

Oakeshott, M. (1933) *Experience and its Modes.* Cambridge: Cambridge University Press. Oxford, UK: Blackwell.

Oppenheimer, S. (2007) *What is a Waldorf Kindergarten?* Massachusetts, Steiner Books.

Patton, M. Q. (1980) *Qualitative Evaluation Methods.* Beverly Hills, Sage.

Payne, V.G. Isaacs, L. D. (2007) *Human Motor Development. A life span approach.* 7th ed. New York, McGraw Hill.

Peck, B. (2004) *Kindergarten Education. Freeing children's creative potential.* Hawthorn Press.

Petrash, C. (2007) *Earthwise. Environmental Crafts and activities with young children.* Great Britian, Floris Books.

Piaget, J. (1929) *The Child's Conception of the World.* NY: Harcourt, Brace Jovanovich

Pluckrose, H. (1988) *Knowabout Pattern.* London, Franklin Watts.

Pole, C. Lampard, R. (2002) *Practical Social Investigation. Qualitative and Quantitative Methods of Social Research.* Prentice Hall.

Pringle, M.K. (2000) *The Needs of Children.* 3rd ed. London, Routledge.

Punch, K. (2005) *Introduction to Social Research – Quantitative and Qualitative Approaches.* 2nd Ed. London, Sage.

Punch, K. (1998) *Introduction to Social Research – Quantitative and Qualitative Approaches.* London, Sage.

Rambusch, N. (1976) *Maria Montessori Dr Montessori's Own Handbook.* New York, Schocken Books.

Rawson, M. Richter, T. (2000) *The Educational Tasks and Content of the Steiner Waldorf Curriculum.* Sussex, Steiner Waldorf Schools Fellowship.

Read, H. (1949) *The Meaning of Art.* London, Penguin/Faber & Faber.

Reid, H. (1958) *Education Through Art.* New York, Pantheon Books.

Richardson, L. (2003) *Writing; A method of inquiry.* Thousand Oaks, California. Sage.

Richter, G. (1985) *Art and human consciousness.* New York, Anthroposophic Press.

Robson, C. (1998) *Real World Research.* Oxford, Blackwell.

Salmon, L. (1997) *Basic Ideas of the Montessori Educational Theory Extracts From Maria Montessori's Writings and Teachings.* England, ABC-Clio Ltd.

Schonfeld, H. Kiernan, G. & Walsh, T. (2004) *Making Connections – A Review of international policies.* Early Childhood Care & Education.

Schonfeld, H. (2004) A Review Of National Policies, Practices and Research Relating To Quality In Early Childhood Care and Education. *Alana, Newsletter of the Center for Early Childhood Development and Education.* No. 9, Summer, 2004, p.4.

Schweizer, S. (2006) Well I Wonder, reviewed by Jill Taplin. *Living Education – A Journal for Steiner Waldorf Schools.* Issue 3, Summer 2007, p.16.

Seefeldt, C. (1987) *"The Visual Arts". In The Early Childhood Curriculum: A Review of the Current Research.* Carol Seefeldt, ed. New York, Teachers College Press.

Shaffer, D. R. (2005) *Social and personality Development.* 5th ed. USA, Thomson Wadsworth.

Sheridan, M. (1997) *Dr Ajay Sharma: From Birth to Five Years.* Revised by Marion Frost. London, Routledge.

Simon, R.M. (1994) *The Symbolism of Style: Art as Therapy.* London, Routledge.

Simon, R.M. (1980) *Introduction to art therapy course.* Child art study observation notes :Belfast Metropolitan College.

Smith, N. (1982) *"The Visual Arts in Early Childhood Education: Development and the Creation of Meaning".* Handbook of research in Early Childhood Education, Bernard Spodek, ed. New York, Macmillian.

Smith, P. (1996) *The History of American Art Education: Learning about Art in American Schools.* Greenwood Publishing Group.

Smolucha, L. Smolucha, F. (1986) 'L.S. Vygotsky's Theory of Creative Imagination'. IN: *The 9th annual convention of the American psychological association* Washington DC. 22-24, August 1986.

Smyth, R. (1995) *An Introduction to Perspective.* New York, Dorling Kindersley Publishing.

Spradley, J.P. (1979) *The Ethnographic Interview.* New York. Holt, Rinehart & Winston.

Steiner, R. (1976) *Education Towards Freedom.* Rudolf Steiner Education. England, Lanthorn press.

Steiner, R. (2003) *Rudolf Steiner in the Waldorf School. Lectures and Addresses to Children, Parents and Teacher.* Skylark books.

Steiner, R. (2004) *Waldorf Education - An Introductory Reader. Excerpts from lectures and written works by Rudolf Steiner.* Rudolf Steiner press.

Standing, E. M. (1998) *Maria Montessori: Her Life and Work.* USA, PLUME.

Stockton, A. (2003) *Steiner, Art.* (Original texts compiled with an introduction, commentary and notes by ann stockton). Ruldolf Steiner Press

Strauss, M. (2007) *Understanding Children's Drawings. Tracing the path of Incarnation.* Rudolf Steiner Press

Taylor, P. (2003) *Applied Theatre: Creating transformative encounters in the community.* Portsmouth NH, Heineman.

Theulet – Luzie, B. (2006) *Make it yourself Masks.* Franklin Watts.

Thistlewood, D. (1994): Herbert Read. *PROSPECTS: the quarterly review of comparative education.* (Paris, UNESCO: International Bureau of Education), vol. 24, no.1/2, 1994, pp.375–90.

Tomlinson, R. (1944) *Children as Artists.* London, Network King Penguin Books

Torrance, E,P. (1970) *Encouraging Creativity in the Classroom.* Iowa, Brown

Tuckman, B. W. (1972) *Conducting Educational Research.* New York. Harcourt Brace Jovanovich.

Van Oers, B. (1997) On the narrative nature of young children's iconic representations: Some evidence and implications. *International Journal of Early Years Education,* Vol 5 No 3, pp. 237-345.

Van Sommers, P. (1984) *Drawing and Cognition.* UK, Cambridge University Press.

Viola, W. (1942) *Child art* . Bickley, University of London Press.

Vogel, N. (2001) *Making The Most of The Plan-Do Review: Teachers Idea Book 5.* HighScope Press.

Vygotsky, L.S. (1978) *Mind in society: The development of higher mental processes.* Princeton, N J, Harvard University Press.

Wallace, G. (1926) *The art of thought.* New York, Harcourt Brace.

Walther, I,F. Metzger, R. (1993) *Van Gogh. The complete paintings 11.* Italy, Taschen.

Winnicott, D.W. (1958) *The Maturational Processes and the Facilitating Environment.* London, Hogarth Press.

Winnicott, D. W (1986) *Home is Where We Start From – Essays by a Psychoanalyst.* London, Pelican Books.

Winnicott, D,W (1964) *The Child, The Family and The Outside World.* London, Penguin Books.

Winnicott, D,W (1971) *Playing and Reality.* London, Tavistock.

Wood, D. (1999) *How Children Think and Learn.* Oxford, Blackwell.

Wood, E. Attfield, J. (2005) *Play, learning and the early childhood curriculum.* 2nd ed. Paul Chapman.

Woods, P. (1979) *The divided school* . London, Routledge & Kegan Paul.

Yung, C.G. (1947) *Modern man in search of a soul.* London, Routledge & Kegan Paul.

Web Sites

Arts Council of England Executive Summary (2004) [Internet] Available from: <www.**artscouncil**.org.uk/media/uploads/.../**artsinengland**sum_phpdOUlh8.do> [Accessed 3March, 2009]

Constable, R. Cowell, M. Crawford, S.Z. Golden, D. Hartvigsen, J. Morgan, K. Mudgett, A. Parrish, K. Thomas, L. Thompson, E.Y. Turner, R. & Palmquist, M. (2005). *Ethnography, Observational Research, and Narrative Inquiry.* [Internet] Writing@CSU. Colorado State. Available from: <http://writing.colostate.edu/guides/research/observe/> [Accessed16 July,2008]

Grierson, E (2006) Creativity, Culture and Identity: Questions of art and art education in a global knowledge economy. [Internet] RMIT University. Available from: <http://www.pesa.org.au/html/documents/2006-papers/Grierson.doc>[Accessed 24 March, 2009]

HighScope Educational Research Foundation (2010a) Teaching Practices [Internet] Available from: <http://www.highscope.org/Content.asp?ContentId=171>[Accessed 22 April,2009]

HighScope Educational Research Foundation (2010b) Courses [Internet] Available from: <http://www.highscope.org/Content.asp?ContentId=100>[Accessed 22 April,2009]

HighScope Educational Research Foundation (2010c) Teacher [Internet] Available from: <http://www.highscope.org/Content.asp?ContentId=35>[Accessed 22 April,2009]

HighScope Educational Research Foundation (2010d) Preschool [Internet] Available from: <http://www.highscope.org/Content.asp?ContentId=63>[Accessed 22 April,2009]

IT Sligo. BA Hons Early Childhood Care and Education SG 242. Available from: <http://courses.itsligo.ie/business-humanities-courses/childhood-education/ba-hons-early-childhood-care-and-education-sg-242/ >[Accessed 4 April, 2010]

Monaghan Institute of Further Education and Training. FETAC Level 5, Childcare. Available from: <http://www.monaghaninstitute.ie/College_Doc/MIFETPROS08/2010_MIFET_prospectus.pdf> [accessed 4/4/2010]

NCCA (2009) Aistear Toolkit [Inernet] Available from: <www.ncca.ie › ... › Early Childhood Education> [Accessed 22 December, 2009]

Schonfeld, H. (2007) *Do Our Pre-School Regulations Result in High Quality Provision?* [Internet] Article written by Heino Schonfeld, Director, Centre for Early Childhood Development and Education (CECDE). Published in the Irish Examiner on 30th September 2007,reproduced by kind permission .Available from: <http://www.cecde.ie/english/pdf/Articles/do%2520our%2520pre-school%2520regulations.pdf > [Accessed 21 May, 2010].

Stephenson, S.M. (2009) The International Montessori Index. [Internet] Available from: < http://www.montessori.edu/europe.html> [Accessed 19 April, 2009]

Saint Nicholas Montessori College Dublin. Bachelor of Arts in Montessori education. [Internet] Available from:<http://www.snmci.ie/programmes/BA/default.htm> [Accessed 30 May, 2010].

Appendix

The observation tool

ENVIRONMENT – Presage Variable	
Physical Environment	Art room General room Part of a room Hallway
Structure of Environment	Shared space Communal space Individual tables Individual areas
Objective of the Art Exercise	Individual work Group work Product based finish Educational function Play/Spontaneous art
Age group	Mixed Spilt

FACILITATION – Presage Variable and Process variable	
Adults Control : Space	Total Control Semi –Control No Control
Adults Control : Time	Total Control Semi –Control No Control
Adults Control : Materials	Total Control Semi –Control No Control
Adults Control : Stay at workstation	Total Control Semi –Control No Control
Facilitation lead with:	Empathy Direction Guidance Control

Facilitation over age differences	Youngest - Oldest -
Is the adult introducing a new skill?	
Is the learning being extended by introducing a new material?	

CHILD – Process Variable and Product Variable	
Type of Art process	Rapid smearing Daubing Slow curving lines Straight lines Objects (people or things)
Colours Used	Single Few Bright Dark Over painted
Mood Observed Before/During/After Painting	Happy Sad Angry Apathetic
Dialogue	Child to child To themselves Child to adult Group conversation
Social Behaviour	Quarrelling Engaging Comforting. Detached
Emotional Behaviour	Happily/Not engaged with teacher Happily/Not engaged with children Happily/Not engaged with activity.
Cognitive Behaviour	Sustained attention in activity Easily distracted.

LEARNING THROUGH ART – Process and Product Are they being provided and developed through the following areas:	
Perceptual & Cognitive Development	Engages in discovery and investigation Notices details Exercises perceptual discrimination Builds on prior information Uses the senses to extract information from the environment Reflects on own works of art Reflects on own artistic process Sees connections in artistic experiences Connects encounters with art to own art making experiences Sees similarities and differences in objects and works of art Understands nature's role as provider of media and inspiration Develops and decodes simple symbols
Social and Emotional Development	Treats own art, art of others, art reproductions, and objects with care Takes turn leading projects and allowing others to lead Cares for art media, natural objects, and natural and constructed environment
Learning Through Art What skills are the children being taught and developing	
Expressive & artistic development	Is able to give form to expression Overcomes obstacles in the giving form to expression Demonstrates progression through stages of artistic development Understands art as a way to express thoughts and ideas Uses creative thinking in the giving of form to expression Is inventive in expression Uses art as a mode of expression

Technical skill	Uses two-dimensional media with purpose Uses three-dimensional media with purpose Can handle a selection of drawing tools with dexterity Chooses suitable media to task at hand Consistently developing new skills and techniques Is inventive with art media Builds on previously learned skills and techniques

Art workshops practice construction

Steiner Waldorf art workshops

1st week - Painting Workshops – a board per child, small jars (recycled), and two colours of paint to dilute, sponge, paint brush and paper. Each paint station set up identical for each child. Top right the two small jars with paint, one with water, wet sponge, brush set right of page and page in middle. Children wait till all ready then lift sponge and wet page, adult reminds them that once they have used one colour and want to use another they must put brush in water jar then dab on sponge before they start.

- Group – make butterflies and place on nature table (Cooper, Fynes-Clinton, & Rowling, 2006, pp.61- 43)

2nd week - Painting Workshops – a board per child, small jars (recycled), and two colours of paint to dilute, sponge, paint brush and paper. Each paint station set up identical for each child. Top right the two small jars with paint, one with water, wet sponge, brush set right of page and page in middle. Children wait till all ready then lift sponge and wet page, adult reminds them that once they have used one colour and want to use another they must put brush in water jar then dab on sponge before they start.

- Group – make lanterns out of last week's paintings (research observation notes 2008)

3rd week - Painting Workshops – a board per child, small jars (recycled), and two colours of paint to dilute, sponge, paint brush and paper. Each paint station set up identical for each child. Top right the two small jars with paint, one with water, wet sponge, brush set right of page and page in middle. Children wait till all ready then lift sponge and wet page, adult reminds them that once they have used one colour and want to use another they must put brush in water jar then dab on sponge before they start.

- Group – Streamers using twigs and strips of coloured paper (Petrash, 2007, p 98)

4th week - Drawing Workshops – a board per child, paper and 5 crayons each. Each station is set up identical for each child. Top right of each board is the crayons laid out in a line in order and page in middle of board. (no outlining is encouraged or taught to draw lines)

- Group – Sun Shape. Children fold paper into 1/8 and cut edges into a curve. Adult then traces sun beams and children cut then open up sun shape (Cooper, Fynes-Clinton, & Rowling, 2006, p. 105).

5 h week - Drawing Workshops – a board per child, paper and 5 crayons each. Each station is set up identical for each child. Top right of each board is the crayons laid out in a line in order and page in middle of board. (no outlining is encouraged or taught to draw lines)

- Group –Make a halo around a candle and light the candle (Copper 2005).

6 h week - Drawing Workshops – a board per child, paper and 5 crayons each. Each station is set up identical for each child. Top right of each board is the crayons laid out in a line in order and page in middle of board. (no outlining is encouraged or taught to draw lines)

- Group - cut out template of dove and make wings (Cooper, Fynes-Clinton, & Rowling, 2006, p. 98)

Materials

Wool, paints, crayons, brushes, sponges, paper, boards, jars, scissors, pen. Two basins. Tissue paper. Pipe cleaners.

Books-

Cooper, S. Fynes-Clinton, C. Rowling, M. (2005) The Children's Year. Seasonal crafts and clothes. Hawthorn Press. UK.

Cooper, S. Fynes-Clinton, C. Rowling, M. (2006) All Year Round. Christian calendar of celebrations. Hawthorn Press. UK

Petrash, C. (2007) Earthwise. Environmental Crafts and activities with young children. Floris Books. Great Britain.

Muller, B. (2004) Painting with children. Floris Books. Edinburgh.

Mainstream art workshops

1st week – Reading the story and asking questions

Group - painting sky, grass and soil - three large pages (backing paper) to be painted green, brown/yellow and blue. For the sky get children to mix some white and blue into a dish and create their own tone of blue for the sky then use sponges to apply. The pages will be placed in the middle of their communal table and each child has their own sponge and dish and starts to cover paper. Then they mix their blue dish with the yellow dish to make green and use their hands on another page to make grass Then they start on the ground having mixed a little green

and red with yellow to make soil and blue use a brush to apply to another page.(Donaldson 2007)

Individual – using blue and green paint let children mix and explore on their own pages through finger painting on the paper plates and putting character stickers on, an activity in keeping with art class research observeration.

2nd week – Creating the forest (display mounted)

Group –Pre cut some leaves then get them to cut their own. Sponge and paint leaves then use these as a printing material. Pre cut trees to be painted brown and each child gets their own to shade. Mix 2 primary colours from green then mix 3rd for brown using the same plates (Donaldson 2007)

Individual – Print with the leaves onto paper plates making their own pattern and use stickers from activity book.

3rd week – Pre cut mouse mask to paint and create. Paint each individual pre-cut animal character.

Group – all paint mouse masks. Discuss the body parts of the animals then adult gives each child a pre-cut shapes and the child must paint it and put it up on wall display. (Donaldson 2007)

Individual – each paint a mouse mask with string already stapled on and eyes cut out. (paint grey then staple on pre-made whiskers and ears) Theulet (2006)

4th week – Create fox and owl mask and create Graffalo.

Group – all paint the pre-cut Graffalo shape and discuss body parts and were to stick it on display (Donaldson 2007)

Individual – each make a fox and owl face mask with string already stapled on and eyes cut out. Theulet (2006).

5th week – Create the Gruffalo and snake mask and spiders and bats.(Donaldson 2007)

Individual – Make snake and graffalo masks. After shown the children a ready made spider and bat let them make a bat/spider – pre cut egg box, paint black and add eyes (From interview with art teacher in FECTAC 2009)

6th week – Read the book and get children to play out the story with their masks on. (Donaldson, 1999, 2007)

Individual – make snake from paper plates (From interview with art teacher in FECTAC 2009).

Materials

Artist quality paint. Colouring pencils. Sponges. Crayons Brushes. Scissors. Glue. Leaves. Small dishes. Colour chart. Card. Backing paper. Paper plates. (Beaver et al Book 2)

Books for project ideas:

Theulet–Luzie. B. (2006). Make it yourself Masks. Franklin Watts. London.Sydney.

O'Leary S, C. (2001) Busy Fingers Autumn. Art and craft ideas. The O'Brien Press Ltd. Dublin.

Gibson R. (1996) The Usbourne book of Printing. Usbourne Publishing Ltd. England.

Donaldson, J. Scheffler, A. (2007) The Gruffalo Activity Book. MacMillan Childrens Books. Oxford

Donaldson, J. Scheffler, A. (1999) The Gruffalo. MacMillan Childrens Books. Oxford.

HighScope art workshops

1st week

Group art – mono butterfly with extra patterns added and children can then create their own personal art folders by sticking on their mono butterflies.

2nd week

Group art – Look at famous Van Gogh paintings, think of colour of the month and create own sunflowers by printing and painting by Walther & Metzger (1993), Hawksley (2001).

3rd week

Group art – Painting and printing sole of shoe making patterns and movement on paper, let the children display their paintings on the walls from previous week Pluckrose (1988)

4th week

Group art – In depth studio workshop, start with finger painting, a long piece of paper mounted on wall and children work in pairs, one pointing to were a dot or mark should be made or a movement of hand then their partner makes that mark or movement. The children then swap roles and the paper starts to fill. The children are then asked what other materials they could use (such as pencils, crayons and markers). Recall afterwards is talking about how the children read the results, how they made it and what they see. Talk about the patterns they have created and make connections. Epstein (2002)

5th week

Group art – In depth studio workshop, paper on table and children use a crayon. The facilitator tells the children to pretend that their hand is a bumble bee and move to the music and when the music stops they stop. Let them print leaves and twigs onto white paper .At recall time gather to discuss their shapes and markings made and name shapes to enrich their vocabulary by Epstein (2002)

6th week

Free art in their own class room with other children moved to activity room (from research observation 2008)

Materials

Paint. Colouring pencils. Sponges. Brushes. Scissors. Glue. Tissue paper. Rollers.

Books used for projects:

Hawksley, L. Cunningham, A. Payne, L. Bradbury, K. (2001) Essential History of Art. Parragon. Bath.

Walther, I,F. Metzger,R. (1993) Van Gogh. The complete paintings 11. Taschen. Italy.

Pluckrose, H. (1988) Knowabout Pattern. Franklin Watts. London

Carle, E. (2002) The Very Hungry Caterpillaer. Puffin Books. England.

Epstein, A,S. Trimis, E. (2002) Supporting Young Artists. The development of the visual arts in young children. HighScope Press. US

Montessori art workshops

1st week, introduce children to the space, show children the colour boxes and how to use them, show them the insets and let all children have a go and give them their inset folders. (Montessori 1976)

2nd week

Group - start with folder of famous paintings (Rambusch 1976)

Individual - let them choose their own art activity. (Montessori 1976)

3rd week

Individual - let children choose their own activity (Montessori 1976)

Groups - bubble painting (Interview notes from Montessori teacher 2009)

4th week

Individual - children choose own activity (Montessori 1976)

Group - time with folder of famous paintings (Rambusch 1976)

5th week

Group - create spinning top (Interview notes from Montessori teacher 2009)

Individual - let children choose own activity (Montessori 1976)

6th week

Individual - let children choose their own activity (Montessori 1976)

Group - marbles in a shoe box (Interview notes from Montessori teacher 2009)

Materials

4 paint pots with brushes in, A4 paper, paint coat

A5 insert folders and A5 white paper

Folder with famous paintings and information of painters

Shelf with paper, scissors, crayons

Books for projects, materials and environment ideas:

Montessori, M. (2003). Basic Ideas of Montessori's Educational Theory. Extracts From Maria Montessori's Writings And Teachings. Clio Press, Oxford.

Rambusch, N. (1976) Maria Montessori Dr Montessori's Own Handbook. New York, Schocken Books.

Costello, J. (1972) Maria Montessori. The Discovery of the Child. New York, Ballantine Books

Equipment

ColourGradingGame.

24 wooden skittles, 6 wooden inset boards, 6 wooden colour control boards where the child matches 4 coloured skittles to a control board in shades of 6 colours. Children then can progress to grading the skittles without the help of the control board, just using it to check that they have completed the task successfully. An opportunity to encourage a child to explore colours and to learn new language associated with colour. ELG: Explore colour, texture, shape, form and space in two and three dimensions.

Colour Tablets Boxes 1 & 2

Box 1: 3 pairs of tablets in red, yellow and blue in a wooden box.

Box2: 11 pairs of tablets in red, orange, yellow, green, blue, purple, pink, brown, grey, black and white in a wooden box.

To introduce the vocabulary of colours and refine the chromatic sense.

ELG: Explore colour, texture, shape, form and space in two and three dimensions.

Colour Tablets Box 3

9 sets of 7 graded tablets in shades of red, orange, yellow, green, blue, purple, pink,

brown, grey in a wooden box. To extend the vocabulary of colours and refine the chromatic sense. ELG: Explore colour, texture, shape, form and space in two and three dimensions.

Pencil Holders On A Wooden Stand

11 individual wooden pencil pots that neatly sit on a wooden stand.

Metal insets on stands

10 metal insets and frames to encourage pre-writing skills, on two wooden stands. This exercise prepares the hand for writing. ELG: Use a pencil and hold it effectively to form recognisable letters, most of which are correctly formed. Move with control and co-ordination. Explore colour, texture, shape, form and space in two or three dimensions. (www.absorbentminds.co.uk sited 16th February 2009)

Proposal of timetable of art workshops to the manager of the HighScope childcare centre

Research 'Preschool Art Systems'

Age Group of 3-5 years old
Preschool group spilt into 4 groups i.e. A,B,C,D
Each group a mixture of age and sex

Research workshops running a total of 24 weeks (6 months)
Starting week 2nd March. Finish week 10th August (Easter holidays to consider)
Workshop days Wednesday and Thursday
Time duration per workshop approx 1 hour
Each group will experience 6 weeks of each preschool system
Research held in general room

Parental consent needed
Art work produced to be held by researcher
Voice recording in each session

Timetable for Art Workshops

Group Art Time Table

Group	Art Methodology	Run for 6 weeks
Group A	Main Stream	
Group B	Montessori	
Group C	HighScope	
Group D	Steiner Waldorf	

Group	Art Methodology	Run for 6 weeks
Group A	Montessori	
Group B	HighScope	
Group C	Steiner Waldorf	
Group D	Main Stream	

Group	Art Methodology	Run for 6 weeks
Group A	HighScope	
Group B	Steiner Waldorf	
Group C	Main Stream	
Group D	Montessori	

Group	Art Methodology	Run for 6 weeks
Group A	Steiner Waldorf	
Group B	Main Stream	
Group C	Montessori	
Group D	HighScope	

Run Time of Workshops

9:30 – 10:30

10:45 – 11:45

12:00 – 1pm

3pm - 4pm

Letter to HighScope childcare centre parents

Dear Parents,

My name is Patricia MacLaughlin and I am a master's research student at IT Sligo. My research area is the study of art in the four different pre-school systems. This action research phase that I am commencing is focused through observation and facilitation within the art process. I shall be running a weekly art workshop session with the pre-school group at H_____.

If you have any questions please do not hesitate to contact me at H_____.

Best regards
Trisha MacLaughlin

Letter of introduction to preschools

To Whom It May Concern:

Patricia MacLaughlin is a full time student of IT Sligo, studying for her Masters Degree in Early Childhood Studies. Her topic is a detailed analysis and comparative study of how different Early Childhood Care and Education Systems promote the development of creativity in young children. Part of her methodology includes carrying out observations in the ECCE settings with the permission of the teams involved.

Please do not hesitate to contact me should you require and additional information.

Yours Sincerely

_____

Doireann O'Connor
Research Supervisor
Early Childhood Studies
Dep. Of Humanities

Pre-school questionnaire

How long are you working in Childcare? (please tick)				
Less than 1 Year	1-2 Years	2-4 Years	5-9 Years	Over 10 Years
How long have you worked within this preschool system? (please tick)				
Less than 1 Year	1-2 years	2-4 Years	5-9 Years	Over 10 Years
What is your highest childcare training/education qualification? (please pick one)				
FETAC Level 6 Full				
FETAC Level 5 Full				
FETAC Level 6 some modules (please list)				
FETAC Level 5 some modules (please list)				
NNEB/NVQ				
Early Years Degree (please state)				
Others (please state)				
What training/education qualifications do you hold in this preschool system? (please state)				
What art training/education qualifications do you have? (please state)				
How do you facilitate art? (please tick)				Empathy
				Direction
				Guidance
				Control
How is the art space used? (please tick)				Shared space
				Individual space
How is the art viewed? (please tick)				As achievements
				Rewarded
				Not signification
Is art used for any objective/development? (please tick)				Artistic/Expressive
				Social/Personal
				Cognitive
Are there any other reasons? (please state)				

Interview Questions

How did you become involved in this preschool system?

What do you see as the principal aims for the use of art through this system?

What are the factors for a successful art experience?

What are the difficulties?

How comfortable and experienced do you personally feel about art?

How is art used for child development or education?

What space is provided?

Where is the adult placed in this environment?

From theory to practice what are the limitations?

How much input does the child have in this process?

How do you evaluate the art experience?