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**“Jake just does scribbles but I do pictures.”**

**Drawing self-efficacy and the messages  
four to nine-year-old children give and receive  
about their drawing**

**Rosemary D. Richards  
2003**

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**A thesis presented in partial fulfilment of the requirements for the degree of  
Masters of Education  
at Massey University  
Palmerston North  
New Zealand**

**Rosemary D. Richards  
2003**

## ABSTRACT

This study investigates the drawing self-efficacy of 136 four to nine-year-olds and the messages they gave and received about their art. Participants responded to a 36-question questionnaire, informed by Bandura's self-efficacy theory (1986). Thirty-five children were interviewed, and 48 were observed. Analysis of the questionnaires revealed that drawing self-efficacy scores ranged from low to high. Over half of the sample had quite high to high drawing self-efficacy. Statistical analyses revealed no significant differences in terms of gender or year levels. However, the Gender by Year Level interaction effect for drawing self-efficacy was statistically significant. The greatest effect size occurred between boys and girls at year four level where boys scored over 1 standard deviation unit lower than the mean, and at new entrant level where boys scored almost 1 standard deviation unit lower than the mean. At the year two level the boys were almost three-quarters of a standard deviation unit above the mean.

Analyses revealed significant differences for subscales on preferences, levels of difficulty, emotional responses, vicarious experiences, and effort and persistence. Data for preferences showed that girls were more likely to choose art activities than boys, and year two children showed the highest preference for art activities while kindergarten children showed the lowest. At the same time there was a general trend towards a decline in drawing confidence as the year levels increased, as shown by responses to items on levels of difficulty. Overall, drawing was an emotionally positive experience except at year four level, where the boys were over one standard deviation unit lower than the mean. Year two children had the highest emotional responses to drawing and year four children had the lowest. Findings suggested that younger children responded more positively to vicarious experiences than older children, believing themselves capable of drawing competently if others could. New entrant girls showed the highest level of effort and persistence, and year four boys the lowest. In general, friends, family and teachers gave positive messages to children about their drawings.

Some children linked drawing competency with reading ability and data revealed a statistically significant Reading Age by Year Level interaction effect for drawing self-efficacy. Data suggests that at years two and three there was a positive



relationship between high reading age and drawing self-efficacy scores. In year four the inverse was observed. However, statistically significant contrasts were not identified.

Several themes and messages emerged from observations and interviews. In the kindergarten proportionally more girls than boys engaged in art activities. Self-selected interactions in both sites favoured same-sex groupings, and in general girls commented more positively about each other's drawings than boys did. Regardless of gender, children with high drawing self-efficacy appeared more confident and gave and received more positive messages than children with lower drawing self-efficacy. Children commented on scribbling and linked drawing to reading and writing abilities. Teachers did not comment about the right and wrong ways to draw, but children measured success by external rewards and by criteria applied to other curriculum areas. Children were critical of each other's drawings and at times the teacher's neutral comments were re-interpreted as negative comments. Emotional responses to art were also linked to patterns of friendship. Children, at all levels, emphasised effort over ability as a reason for success with drawing. Children who had a reputation for drawing specific topics often displayed higher drawing self-efficacy than age peers, and by year three the issues of ownership of ideas and copying were apparent. At both sites children provided a greater source of verbal persuasion than teachers. The teachers were positive at all times, although they tended to praise appropriate behaviour rather than comment on elements of the drawings. In general children with the highest drawing self-efficacy were the most resilient to negative messages and experiences.

Findings did not support a strong relationship between teachers' comments and levels of drawing self-efficacy. However there was some support for the view that children's drawing self-efficacy declines once a child attends school, when gender and year level are both considered. In this sample the girls had an increase in drawing self-efficacy when they started school that dropped marginally in year one, but then continued to increase with age. On the other hand the boys had a drop in drawing self-efficacy on starting school, that then increased until year two, and then took a sharp decline. Qualitative data tended to support these findings.

Recommendations for instructional practices in schools and kindergartens include a focus on participation, theme and inquiry-based programmes, critiquing of artworks, children teaching children, teacher professional development, and understanding drawing self-efficacy levels of children.

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# CHAPTER ONE

## INTRODUCTION

### 1.01 Background to the Study

My interest in art self-efficacy arose from my experiences as an art educator at both a primary and tertiary level. Some students were positive about their ability to draw or produce art works and were not easily deterred even when having difficulties. On the other hand, some people expressed an almost passionate fear of creating artworks, especially drawings. They were reluctant to draw in front of others and claimed an inability to draw. Some adults expressed anguish about drawing and used such emotive statements such as, “I can’t draw to save myself,” or “I’ll just die if you make me draw.” Adults, who were usually confident and socially outgoing, showed physical symptoms of stress when asked to draw. I have observed adults sweating, clenching their fists, and complaining of nausea and headaches in anticipation of drawing.

Nevertheless art education was a compulsory course of study for pre-service teacher education students at the university at which I teach. Therefore the sessions were structured in such a way that these people were encouraged and guided to understand the art making processes, and to create artworks. A sense of accomplishment and pride replaced anxiety and, almost without exception, these students not only overcame their fears but also became excited and enthusiastic about art. This reinforced my belief in the ability to teach anyone to develop greater confidence and competence in the visual arts, and in the powerful mediating influence of positive experiences on perceived efficacy. Many of these ‘converts’ have become truly hooked on art as their trapped potential was unleashed and they enjoyed the success and praise they had been denied previously. This led me to wonder about past messages these people had received about their drawings and how these had influenced their belief in their ability to draw and create artworks.

When I talked to reluctant students about their initial self doubts they invariably spoke of never being good at art, or quite often of a specific negative experience from many years ago. Vanessa provided one example:

*My experience was with children in the class – we had Standard Four kids coming in to look after us – that was Primer One in those days. I was five. And we had to draw a picture at the end of the day and draw anything you like. And most kids were drawing animals and I chose to draw a horse. I was really proud of my horse. It was a brown horse. And showed them [the Standard Four children] - - and they laughed. Everybody laughed and it had five legs. I didn't think it was funny. I just thought "what's wrong with it?" and oh they said it had five legs - - horses don't have five legs. Everyone just laughed. And then after that I lost interest in art and thought well I don't want to draw. And actually how I got through primary [school] - - there was a boy at school who was quite an artist - - used to get him to do my artwork.*

*The teachers would have known. He was an artistic kid – if I needed to draw something I just got him to do it.*

*I did have another experience at Intermediate. In this one the art teacher there she was quite a stickler for having everything done the way she wanted it done and there was no exploration of your own ideas. I remember doing shapes and my shapes weren't quite sitting right – drawing 3-D buildings, which you draw the lines down. And she said "Arr! You've got it all wrong and things are going the wrong way," and she gave me a hard time about it. That was like another experience – and like that's it, I just can't draw.*

Vanessa's experience suggested that it was not just the art outcome that influenced self-belief, but also the response of others. As Vanessa told her story, her voice and face conveyed the emotional impact these experiences still had on her. The messages received, and her emotional response to them stood out in her memory and influenced her responses to art. However messages were not always verbal. Peggy, a 42-year-old student teacher said she felt physically sick in anticipation of drawing. She told me later that although the fear was irrational, she feared that I would look at her drawing, find it lacking and rip it up in front of others. Although she knew I would not do this, she had memories of drawing experiences that were so detrimental to her perception of the drawing process, she was afraid of being humiliated. Peggy told me of the vivid memories she had of herself as a 13 year-old

and a male teacher who roamed the classroom during drawing lessons and, without saying a word, took drawings off students and ripped them up. Peggy had experienced this humiliation several times and relived the fear 29 years later. She also strongly believed that she just couldn't draw.

In my experience, parents and early childhood educators often expressed a 'commonsense' view that a decline in art confidence stemmed from experiences at school. Three of my friends had children at early childhood centres or in junior classes. When I discussed my thesis topic with them they all independently expressed the view that the open nature of early childhood education fostered creativity but the school system tended to destroy it. They felt children at school were told how and what to draw and as a result developed low self-concepts about their own abilities. The following story published in R.E.A.L., an educational magazine aimed at "parents with children from 4 to 14," was pointed out to me by two of these friends. The story was part of an article on creativity (Macleod, 1999, p. 7).

Once upon a time there was a four-year-old girl who was desperately looking forward to school. She had spent the last year making mudpies and snowmen in the sandpit decorated with bits of shells and bark, and using up the pre-school's supply of glitter on the collage table. When her fifth birthday came she eagerly skipped off to school clutching her brand new school bag and brand new birthday felts – 46 of them in all the colours of the rainbow.

The teacher said, "Today we are going to draw a picture." "Good," thought the little girl - thinking of all the things she could draw – alligators and lions, fairies and sunsets, spaceships and dragons and she took out her brand new felts and began to draw. The teacher said, "Wait. It isn't time to begin." When the teacher had all the children's attention she told them that today they would draw flowers. The little girl drew beautiful multi-coloured flowers with zigzag petals and spotted leaves. The teacher said, "Wait, I will show you how." And drew a red flower with a green stem. The girl looked at both and liked hers better but turned over her paper and drew a flower just like the teacher's – red with a green stem. Soon the little girl learnt to

watch and wait and make things just like the teacher and pretty soon she didn't make anything of her own any more.

Then it happened that the little girl and her family moved to another city and when she went to school the teacher said, "Today we are going to draw a picture."

And the little girl asked, "What am I going to draw?"

The teacher said, "I don't know until you draw it."

"Well, how shall I draw it?" asked the girl.

"Any way you like," the teacher answered.

"And any colour?" asked the little girl.

"Any colour," said the teacher. "If everyone drew the same picture and used the same colour, how would I know who made what and which was which?"

"I don't know," said the little girl, and she began to make a red flower with a green stem.

This view again suggests that messages influenced a person's concept of their art abilities and level of creativity. In this story the messages were those given by the teacher and the story did not consider the messages children received from other children. The negative outcome for the child resulted from restraining influences and negative messages in the early experiences of school, following the free expression of pre-school experiences. It is interesting to note that the child in the story was exposed to extremes in teaching styles. The first approach was teacher-directed and product oriented, while the second was child-centred but offered no motivation or guidance. Neither approach was ideal for developing confidence and skills, although the story suggested that the author and audience would prefer the teaching style of the latter.

## **1.02 Commonsense View and Literature**

A search of educational journals and magazines revealed no research linking a decline in drawing confidence to the school environment, however the theme of school practices negatively influencing creativity continued. For example a parent, and educator, shared her dismay as her child first started school (McConnell, 2000, p. 19).

So when I arrived with my first five year old at school I was dismayed to see 'spring' was the theme. Twenty sheep all exactly the same, cut out by the teacher (the teacher's work) with wool glued on by the children (what did they learn?). Twenty daffodils all made exactly the same with green straw stems and yellow patty cake centres (whose creativity?). Where was the diversity of nature's daffodils and the diversity as seen through the senses of the children? My heart sank, and I was left with the challenge of keeping alive my child's belief in her artistic ability.

Not only was this experience obviously distressing for the parent it was also in conflict with her basic beliefs. McConnell (2000) stated, "I believed, like Viktor Lowenfeld and W. Lambert Brittain, that if it were possible for children to develop without interference from the outside world, no special stimulation for their creative work would be necessary" (p. 19).

Some researchers noted a decline in drawing or satisfaction with drawing at a later age. Cox (1991) noted that around age seven children began to express greater dissatisfaction with their drawings, and Gardner (1982) noted a decline in enthusiasm about acquiring art skills amongst adolescents. Cox (1991) and Gardner (1982) suggested there were links between drawing and understanding realism that influenced confidence. Gardner (1982) also advocated teaching children art and critiquing skills to combat falling confidence levels and enthusiasm.

Researcher Rhonda Kellogg, who was a preschool teacher, analysed a vast number of children's drawings, over a 22-year period. Kellogg noted the decline in drawings amongst eight-year-olds, and she explained this in terms of inappropriate adult pressure, lack of positive messages and poor teaching practices (Kellogg, 1979, p. 142).

After ages six to seven comes the decline and fall of spontaneous art for all but a very few. The pressures to succeed in school by the absorption of adults' ideas about art as well as other subject matter results in children's abandoning art at this time. There are always a few whose work receives sufficient approval to keep them going. Much of the art activity in schools is merely busywork.

Although Kellogg contributed a great deal to understanding children's drawing development her views about the reason for a decline in what she terms 'spontaneous art' appeals to a commonsense view. These views, expressed over 20 years ago, were based on the collection and analyses of drawings but did not appear to be backed by direct interaction with the young artists.

### **1.03 Developing a Research Topic**

All these views, both academic and commonsense, had threads in common and indeed, if the decline in artistic development was so clearly linked to the messages that children received and the experiences they had, then this was worthy of further research. A preliminary literature review did not shed light on the issue: there was no specific research on the development of drawing confidence and the role of messages. Therefore, my own experiences and the views commonly held by others, regarding the reason for low drawing confidence, formed the starting point for this research project.

While the commonsense views were a starting point for my investigation they also needed scrutinizing. Implicit in these views were several assumptions. The first assumption is that young children are naturally highly creative individuals with a positive perception of their own ability to draw. Secondly, art confidence was seen as fragile percept that was easily destroyed or lost. What was more, those seen as responsible for destroying a young person's confidence and self-belief in art were those in positions of power over the young – be they older children or teachers. Each of these assumptions left me wanting to explore and challenge the commonsense view.

The first assumption, that all able-bodied young children naturally and willingly draw, was one that supported the idea of the universal child who, left unrestrained, will progress through natural developmental stages to their full potential. While drawing and mark-making is a spontaneous activity undertaken from an early age, the assumption that all children entering pre-school facilities are naturally competent and confident is untested. Indeed, exploring this question from a child's point of view was worthy of research in its own right.

The second assumption, that children's confidence and self-belief can be so easily lost or destroyed, led me to ponder the stability of self-concept. If confidence



was so open to change, then was the negative self-concept open to reversal back to a positive level? Positive art experiences can build confidence levels, however the commonsense view implied that once broken, a child's spirit was not resilient enough to rebuild to that supposedly desirable former state of confidence and creativity.

Lastly, the view that placed the blame squarely at the feet of teachers naturally struck a defensive chord. That aside, the view that placed the adult or elder as the all-powerful and did not take note of the social relationship amongst children must be open to scrutiny. The examples of actual experiences provided reflective insights from the viewpoint of adults. The experiences shared by Vanessa and Peggy were adult views, and perhaps redefined through the commonsense lenses of adulthood. Again, research in the area of children's own art experiences, told in their own stories would provide valuable insights into the children's perceptions of themselves as artists and the role messages play in influencing their drawing self-efficacy.

Any one of the above assumptions would be worthy of further research. However I wanted to go back a step further and ask what do young children believe about their ability to successfully undertake a drawing activity. Also, if messages are indeed the main influence on their beliefs then what messages do young children give and receive with regards to drawing.

Children aged between four and nine seemed to be an appropriate sample to examine these questions as this age range represented both the early childhood experiences and the first four years at primary school. During this period children experienced two transition stages: at four to five years of age there is a transition from an early childhood setting, such as kindergarten, to school, and at eight to nine years there is a move towards recognising realism in art. The first transition was a physical and social change of environment, while the second transition was cognitive or conceptual and would be specific to the individual.

Bandura's theories of social learning (1977), social cognition (1986), and self-efficacy (1995, 1997) provided the overall framework for the investigations. The formation of self-efficacy beliefs, which are domain specific and are influenced by experiences and messages, was most relevant to this research.

## **1.04 Overview**

The purpose of this study is to investigate the drawing self-efficacy levels of a

group of four to nine-year-old children and the messages they give and receive about their drawing. This research will provide insights into the way teaching practices and children's experiences contribute directly or indirectly to children's drawing self-efficacy. Chapter Two, the literature review, presents the theoretical basis for the study. It draws together three main themes: self-efficacy, the developmental stages associated with four to nine year old children in relation to drawing development and perceptions, and drawing and art education. Chapter Three, which presents the research methodology, outlines the research model, documents the development of the questionnaire, and discusses the research methods used in this study.

Findings are presented in three chapters. Chapter Four, the questionnaire findings, presents the drawing self-efficacy levels of the children in the sample, and examines these in terms of year levels and gender. The source and nature of messages are discussed. Chapter Five outlines results from the kindergarten interviews and observations and Chapter Six presents the results from the school interviews and observations. Findings are categorised into themes. Chapter Seven discusses the sources of drawing self-efficacy information. The messages that children give and receive are discussed in relation to gender, year level and drawing self-efficacy levels. Issues and implications of the findings are discussed in relation to the school and kindergarten setting. Chapter Eight presents the conclusion and a discussion of implication and recommendations for instructional practices that span both educational settings. The chapter concludes with a discussion on the strengths and weaknesses of this study and the implications for further research.



## CHAPTER TWO

### LITERATURE REVIEW

This chapter explores three key areas of the research topic:

1. Self-efficacy
2. Four to nine year old children's developmental stages in relation to drawing development and perceptions
3. Drawing and art education

Throughout this discussion links will be made to how these factors relate to the drawing self-efficacy of four to nine-year-old children, and the messages they give and receive. This chapter concludes with an outline of the research questions.

### Self-Efficacy

#### 2.01 Concepts of Self

Educators have recognised the importance of the relationship between the motivation to achieve and self-belief in academic capabilities, but this relationship has been difficult to measure in a scientifically valid way (Zimmerman, 2000). However, in 1977 Albert Bandura proposed a theory of the origins, mediating mechanisms and effects of personal efficacy. This theory opened the way for measuring self-efficacy beliefs in various domains of functioning. Bandura's theories of social learning (1977), social cognition (1986) and self-efficacy (1995, 1997) provide the foundations for developing research tools and methods in assessing children's drawing self-efficacy. When discussing self-efficacy it is useful first to clarify the term in relation to other concepts of self.

**Self-concept:** Children develop a self-concept through "direct experience and evaluations adopted from significant others" (Bandura, 1986, p. 409). Self-concept is tested by matching self-concept with indices of adjustment, attitudes and behaviour (Bandura, 1977, 1986, 1995) and tends to be more global and less context dependent than self-efficacy. Self-concept "includes beliefs of self-worth associated with one's perceived competence" (Pajares & Millar, 1994, p. 194).

**Self-esteem:** Self-esteem is the affective, evaluative component of the self-system. A person's self-esteem "pertains to the evaluation of self-worth, which

depends on how the culture values the attributes one possesses and how well one's behaviour matches personal standards of worthiness" (Bandura, 1986, p. 410).

**Self-efficacy:** Self-efficacy is defined by Bandura (1986, p. 139) as "people's judgements of their capabilities to organise and execute sources of action required to attain designated types of performances." Self-efficacy is concerned with the judgement of personal capabilities in relation to a specific domain.

## 2.02 Self-Efficacy

Self-efficacy is one's belief in the ability to accomplish a certain task. As perceived self-efficacy involves a generative capability, where action is organised to meet a purpose, self-efficacy theory helps to explain why individuals choose different courses of action in seemingly similar situations. For example some people will gain successful outcomes after testing alternative forms of behaviour and strategies, while others are quick to give up if initial efforts are not successful (Bandura 1986). Perceived self-efficacy is partly independent of the underlying skills and children with high self-efficacy will rework solutions and persist in difficult situations (Bandura, 1977; Pajares, 1996). Ideally, competent functioning requires both skills and self-belief, and also the ability to adapt to changing situations (Bandura, 1986).

Children with high self-efficacy would expect favourable outcomes, while those with low self-efficacy would expect mediocre performance and negative outcomes. People with low self-efficacy are likely to avoid challenging activities and restrict their choices and involvement in associated activities, and thus validate their self-doubt (Bandura, 1986). Therefore children with low drawing self-efficacy are likely to avoid drawing and in doing so both reinforce their self-doubt and limit their opportunity to develop drawing skills. Also those who believe they can successfully draw will persist until they are satisfied with the outcome, while those who doubt their future success will not persist.

Because people see outcomes as linked to their adequacy of action, and care about the outcomes, they will choose courses of action based on their self-efficacy (Bandura, 1986). Therefore people tend to undertake tasks they judge themselves capable of and preference can be seen as one indicator of self-efficacy. Furthermore "social comparative information figures prominently in self-efficacy appraisals" (Bandura, 1986, p. 400), and how children see their drawing competencies in relation

to those of peers and family influences their drawing self-efficacy.

### 2.03 Sources of Self-Efficacy Information

People base their efficacy perceptions on information available to them and specific to the domain they are working in. Bandura (1986) has suggested four main sources of self-efficacy information. These are performance attainment, vicarious experience, verbal persuasion and physiological states.

**Performance attainment** is based on the actual mastery of the task and as such is highly influential on self-efficacy. Previous successes and failures influence the weight given to new experiences. High success leads to the belief that set backs are a result of faulty strategies rather than an inability, whereas low success leads to a belief that setbacks are the result of inability rather than faulty strategies (Bandura, 1986). As tasks can vary greatly, responses to success and setbacks can also vary. The extent to which people will change their perceived efficacy depends on the difficulty of the task, the effort expended, the amount of external aid, the circumstances under which they perform along with their emotional responses to their successes and failures, and the pattern and timeframe of experiences (Bandura, 1986).

**Vicarious Experience** occurs when one sees another person succeed or fail in a task. This is particularly influential when there is no previous first hand experience and the activity is modelled to convey information about the nature of the task and ways of working. Successful modelling can raise the self-efficacy of both the confident and those with self-doubts, and weaken the impact of direct experience of failure (Bandura, 1986). According to Bandura (1986), the extent to which a person will change their perceived efficacy depends on their similarity to the model on personal characteristics such as age, race and gender. Furthermore, seeing different people master difficult tasks is superior to seeing the same model master the task, and seeing models achieve in difficult situations by determined effort is likely to raise perceived efficacy. While insecure people avoid comparison with superior models, seeing a skilled person fail due to insufficient strategies may boost the confidence of one with more suitable strategies. Those who perceive themselves as superior to a failing model maintain their sense of self worth and do not slacken their efforts. Those with comparable ability to a failed model are negatively influenced (Bandura, 1986, 1997).

**Verbal Persuasion** refers to the feedback a person gets while learning new skills and performing particular tasks. Verbal persuasion, from someone who is credible and understands the task, can be effective if set within realistic bounds slightly ahead of where the person is at the time. Positive persuasion has the greatest impact on those who already believe themselves capable of succeeding while negative persuasion has the greatest effect on those who doubt their ability to act successfully. It is probably more difficult to raise self-efficacy through verbal persuasion than it is to decrease it through negative comment (Bandura, 1986).

The **Physiological State** of a person leads them to believe in, or to doubt their ability to succeed, as stress associated with fear of failure will limit activity. Likewise fatigue and pain may influence self-efficacy for physical tasks and affective arousal may be judged as one indicant of coping self-efficacy. Mood may also influence efficacy and performance and Bower (1981,1983, cited in Bandura 1986) claimed people learn faster when in a mood congruent with the activity, and will recall things better when in that same mood.

It is the interactive as well as the independent effects of these sources of information that influences an individual's perception of self-efficacy. These four sources of self-efficacy information form the basis of the drawing self-efficacy questionnaire. The social context in which self-efficacy is developed is important and in the classroom such information may arise from interaction with teachers and peers, and from the constructs children bring with them.

### **Locus of Control**

Actual experience is highly influential on the development of self-efficacy beliefs. However, the way in which a person interprets success or failure can vary. On one hand a person may attribute success or failure following an activity to internal factors such as their own efforts and abilities. On the other hand, results may be attributed to external factors such as luck, the task, or the actions of others. Rotter (1954, in Goulton 1997) linked these beliefs in the reason for success or failure to a person's *locus of control*.

One might suggest that people with a positive self-efficacy are likely to exhibit an internal locus of control, while self-doubters are likely to exhibit an external locus of control. However Bandura suggests that, unlike self-efficacy beliefs, locus of control is not concerned with perceived capability, but with belief about

whether outcomes are determined by one's actions or by forces outside of one's control. Therefore, in terms of this research, indications of locus of control may have limited value in assessing self-efficacy beliefs. However, it would be of interest to examine the relationship between locus of control and self-efficacy beliefs, and to observe whether any patterns emerge between these in relation to the various age groups.

## **2.04 Research on Self-Efficacy**

Research focussing on self-efficacy has grown in depth and breadth since Bandura's (1977) publication *Self-efficacy: Towards a unifying theory of behavioural change*. While educational research in the visual arts is scarce, self-efficacy research in other areas can inform research in the arts. Research in the field of mathematical problem-solving and the role of self-efficacy and self-concept beliefs has shown that self-efficacy was more predictive of problem solving than was self-concept (Pajares & Millar, 1994). Research on the influence of self-efficacy on elementary student's writing also found that "self-efficacy beliefs made an independent contribution to the prediction of performance despite the expected powerful effect of writing aptitude" (Pajares & Valiante, 1997, p. 353).

Both of these studies took a quantitative path analysis approach to explore the nature of casual relationships in non-experimental studies. Three hundred and fifty undergraduates in the math study, and 218 fifth grade children in the writing study, responded on a 5-point scale to statements linked to self-efficacy, apprehension, perceived usefulness and performance. The mathematics research included measures of math self-concept and prior experiences and the writing research included measures of the children's writing aptitude as assessed by the teachers.

The path analysis approach proved useful in establishing the predictive and mediational role of self-efficacy. However path analysis is most appropriate when the tenets of social cognition theory and previous findings are such that "hypothesized relationships have strong theoretical support" (Pajares & Millar, 1994, p 197; Pajares & Valiante, 1997, p. 356). However, as research in the area of arts education in general is still limited in depth and breadth, a path analysis research approach may prove more effective in future research.

Art research is guided by theory and past research, and researchers in other

academic areas have generally assessed self-efficacy beliefs by participants reporting on the level, generality and strength of their confidence to accomplish a certain task (Pajares, 1996). These measures of self-efficacy have generally proved adequate in assessing self-efficacy. However, in the field of the arts where artists and audience interpret and create art works with an emotional element, sources of self-efficacy information and the participant interpretation of these is important. Therefore this research will also consider vicarious experiences, emotional responses and performance beliefs, messages and attitudes.

Research findings have generally supported the contentions of social cognition theory with regards to the role of self-efficacy but also support other expectancy theories. Bandura (1986) suggested that accurate self-efficacy results were best obtained when there was a high level of specificity and correspondence to critical tasks. In other words, the research enquiries must link both to the specific domain under investigation and the actual tasks they are linked to; otherwise the results will measure a general sense of efficacy or confidence. In the math and writing self-efficacy research the participants undertook a math exercise or essay writing directly after responding to the questionnaires.

In terms of this research project the link between research enquiries and the critical task has several implications. Firstly, while math and writing exercises can measure competence of performance and link this to the responses, drawing does not have a prescribed set of conventions or correct answers. Matching the success of the drawing with self-efficacy levels is problematic, and such an exercise often requires a team of people making professional judgements. For example, the New Zealand Ministry of Education employed 50 tertiary students and 155 teachers to mark and analyse art works and responses to art from 2,880 year four and year eight students, as part of the 1999 Art National Education Monitoring project. The marking process included "extensive discussion of initial examples and careful checks of the consistency of marking by different markers" (Ministry of Education, 2000, p. 7). In my research on drawing self-efficacy reliable matching of the children's expectation of success with the success of their drawing would be outside the scope and resources of the project. Rather, an emphasis will be placed on the messages the children gave and received and how these related to their drawing self-efficacy levels.

Secondly, as measures of self-efficacy need to be linked to a specific context,



self-efficacy in the visual arts will focus on drawing. Drawing is viewed as an integral part of the visual arts, rather than a unique feature, and initial questions will relate to art in general so children can discuss issues important to them in art and drawing. Also, as the kindergarten setting allows children to select their own activities, art activities other than drawing may be observed and discussed. Overall however, the research questions and observations will focus on drawing.

Thirdly, in addressing specificity and correspondence to critical tasks, questions that are linked to specific drawing experiences will be mirrored in the classroom observations. For example, children will be asked about their belief in their ability to draw people and real objects, and these drawing topics will provide the basis for the sessions observed in the school.

Goulton (1997) related the concept of locus of control to cultural and academic self-efficacy of Maori student teachers. The research included a questionnaire that reflected concepts in self-efficacy as espoused by Bandura and Schunk (1996), and comprised 84 items. Responses to this questionnaire were analysed to reveal common themes and the academic and cultural efficacy of the participants. Those representing the highest and lowest in academic and cultural efficacy were interviewed to gain insights into their feelings, thoughts and intentions. This methodology, which provided quantitative and qualitative data and identified factors that influenced self-efficacy, will be used in this study and adapted to suit four to nine year old children.

Cultural identity in relation to academic self-efficacy was central to Goulton's research (1997). Cultural identity can influence collective efficacy where groups of people have a shared belief in their capacity to attain goals (Bandura, 1997). Therefore one can suggest that other indicators of groupings such as age, gender, and physical characteristics, could be influential on self-efficacy. Likewise membership of a group such as a family, classroom, school or sporting group may lead to shared beliefs and messages regarding expected competencies. In terms of this research a child's place in the social setting of the classroom will take precedence over their membership of a group based solely on age. Children will be ranked on their self-efficacy scores in relation to their classmates, and data will provide statistical information on drawing self-efficacy in relation to year groups and gender.

## 2.05 The Role of Messages in Self-Efficacy Beliefs

Verbal persuasion as a source of self-efficacy information (Bandura, 1986) exist within a network of social interactions. The context in which feedback is given, the presence and reactions of others, and the credibility of the persuader, can all impact on the effect of that message. Young children engage in social interactions with others, giving and receiving messages, which influence their thoughts and actions. They develop shared understandings and use language to express needs, wants, thoughts and experiences. Messages can also be communication through body language, facial expressions, laughter, grunts, touch, and tone of voice. Likewise social acceptance, inclusion or isolation are part of the complex message systems that mediate children's actions and influence their self-beliefs. Research supports the view that social interaction is important for children, both in terms of enjoyment and displeasure. In a New Zealand study Gallaway (1999), following the research approach of Lanstead (1994, cited in Gallaway, 1999), interviewed her 28 kindergarten children to gain an insight into their views on kindergarten. Twenty-five of the 28 children noted the presence of other children as the main reason for liking kindergarten, while the remaining three disliked kindergarten for the same reason.

Drawing is one of the earliest forms of visual communication using mark making. Drawing is used to express not only pictorial images but also over time to make marks that represent letters, words and numbers. The adequacy displayed by the child in making these marks or images is open to reaction from others. Freedman (1997) argued for the consideration of sociocultural learning in art education because "when children begin their social life, and the emergence of language occurs, their art becomes increasingly influenced by society and culture" (p. 100).

A sociocultural perspective recognises the importance of shared experiences and the negotiation of what counts as knowledge (Dockett & Perry, 1996). This is often apparent when children play together and negotiate roles and rules for play, building on this to create elaborate scenarios with commonly held understandings (Campbell and Bickhard 1986, cited in Nelson 1996; Farver 1992; Göncü, 1993; Kane & Furth 1993). Art activity and drawing in the kindergarten setting is seen as a form of exploratory, creative play (Brandon, 2000). It is around this age that children develop intersubjectivity, where individuals who start with different understandings work together to reach a common goal, and create a common ground for



communication (Berk and Winsler, 1990). Language shared with others moves the child from a largely experientially based system to a potentially language-based system in which they must integrate individually constructed knowledge with the culturally established systems (Nelson, 1996, p. 335). These culturally established systems might also be applied in interpreting drawings and drawing ability.

As children interact in social groupings the witnessing of another's messages and drawing could provide vicarious experience and influence self-efficacy and task response. Efficacy appraisals are often based on "similarity to models on personal characteristics that are presumed to be predictive of performance capabilities" (Suls & Miller, 1979, in Bandura, 1986, p. 404). Vicarious experience therefore, would be most influential when individuals have similar personal characteristics.

Children can be influenced by watching other children draw. Furthermore, research (Cox, 1992; Wilson & Wilson, 1982) suggests that symbols and images, characteristic of groups of children, may be employed across various times and places and cultural factors can influence the way children represent people, things and places, in a specific group or time. In terms of this research one would suggest that culturally accepted and promoted images may provide broader vicarious experience by which a child can measure their own or other's ability to draw well. There may also be a relationship between the messages children receive and their stage of development of graphic representation in relation to their age.

Verbal interaction and other feedback have been investigated in a number of educational settings and academic areas, and several studies have noted the nature of interactions between children. Research undertaken by Schunk (1998), with regards to self-regulated learning in mathematics, noted that children of various abilities or confidence displayed differing patterns in the verbal interactions and self-talk. Biemiller, Shany, Inglis and Meichenbaum (1998) also noted that children of high confidence and achievement tended to instruct others and to monitor their own progress. Children have been shown to speak to a less able peer as though speaking to a less mature person, and modify and simplify their speech to communicate meaning (Cox, 1991).

Children seem aware of other children's abilities. When Bird (1994) examined the discourses of ability and effort, following a term's observation in a class of seven to eleven-year-olds, she noted the use of derogatory remarks about the

inability to read as a means to humiliate and control. Although the school made an effort to disguise the hierarchy of groups, such as in reading, children appeared to know how they were ranked. Bird (1994) also noted occasions when children changed their reactions to each other after a comment by teachers. For example, a child who proudly displayed her lengthy written story initially received positive reaction from her peers. However, when the teacher commented that she did not need to double-space her story, her peers became critical of her work. Although the teacher's comment was not directly about the story, or the level of effort or ability, the message was translated into a negative one.

Teachers and adults are an important source of feedback for children. Research by Weiner (1994, cited in McNerney & McNerney 1998) suggested that when a teacher saw a student's failure as a result of lack of ability they often expressed sympathy and offered no punishment, while a student who failed due to perceived lack of effort often received verbal reprimands. The first situation gave the message that the teacher viewed the failure as unavoidable due to inability and reinforced low self-belief in success, and led to lowered performance and set up a self-fulfilling situation. In the second situation, when a student accepted a teacher's anger at low effort they were likely to infer self-responsibility and increase their effort and performance. Graham (1988, cited in McNerney and McNerney 1998) also found that students increased effort and performance when teachers expressed anger after failure. However, like verbal persuasion, for this to be an effective motivation the increased effort must be able to facilitate improved results. Schunk (1981, cited in Pajares, 1996) also showed that positive comments by the teacher regarding effort prior to performance raised the students' self-efficacy expectations and subsequent performance.

## **2.06 Summary**

Self-efficacy is one's belief in their ability to accomplish a certain task and involves a generative capability that is partly independent of the underlying skills. Bandura (1986, 1997) suggests that people will exhibit behaviours, and organise action, in relation to their self-efficacy. There are four main sources of self-efficacy information: performance attainment, vicarious experience, verbal persuasion and physiological states (Bandura, 1986). While researchers generally assess self-efficacy

beliefs by asking participants to report the level, generality and strength of their confidence to accomplish a certain task or succeed in a certain situation (Pajares, 1996), the four main sources of self-efficacy information will also inform the development of the drawing self-efficacy questionnaire. Locus of control, which is concerned with whether outcomes are believed to be determined by one's actions or by forces outside of one's control, will also be feature in the questionnaire.

Accurate self-efficacy information is best obtained when there is a high level of specificity and correspondence to critical tasks (Bandura, 1986). Therefore measures of self-efficacy in the arts will focus on drawing, and questions will be linked to specific drawing experiences that will be mirrored in the classroom observations. Furthermore, while matching the success of the drawing with self-efficacy levels is problematic, emphasis will be given to the messages the children give and receive and how these relate to their drawing self-efficacy.

Messages, which are a key aspect of this research, can be verbal or non-verbal, including communication through body language and social interactions. The social aspect of the school or kindergarten is important and through shared experiences children negotiate what counts as knowledge (Dockett & Perry, 1996). Kindergarten art activity is seen as a form of creative play (Brandon, 2000) and as children mature their drawn symbols and images are also increasingly influenced by cultural factors (Cox, 1992; Freedman, 1997; Wilson & Wilson, 1982). Peer interactions are pivotal in understanding the development of drawing self-efficacy of children and the themes that emerge from observations and interviews will be discussed.

Children of various abilities or confidence display differing patterns in the verbal interactions and self-talk (Schunk, 1998), instruction of others and self-monitoring (Biemiller, Shany, Inglis & Meichenbaum, 1998), and speech patterns when speaking to less able peers (Cox, 1991). Bird (1994) also noted the use of derogatory remarks about reading ability to humiliate and control. While children are not ability grouped for drawing it would be interesting to note if children do judge other's abilities, and showed similar patterns of verbal and social interactions as observed by other researchers.

Teachers are an important source of feedback for children, and Bird (1994) noted occasions when children changed their reactions to each other after a comment

by teachers. Research by Weiner (1994, cited in McInerney & McInerney 1998) suggested that teacher reaction to a student's failure can give an impression that the result is due to lack of ability or effort, and have differing effects on the students subsequent actions. Schunk also showed that positive teacher comments about effort, made prior to performance, raised the students self-efficacy and subsequent performance (1981, cited in Pajares, 1996). Therefore, not only are the comments teachers make about drawing ability and outcomes important, but so too are the messages they give directly and indirectly to children.

### **Four to Nine-Year-Old Children**

In this study four to nine-year-olds were selected to represent both the kindergarten experience and the first four years at primary school. This age period involved a transition from early childhood centres to primary school and a development from early representational drawn images to recognising realism in art. An understanding of children's cognitive and social developmental characteristics was considered in developing research methodology suitable for young children (Christensen & James, 2000), and in understanding drawing development.

## **2.07 Developmental Characteristics**

Drawing and mark marking is a spontaneous activity undertaken from a very early age as the infant child explores their environment and their ability to impact upon it. The first scribbles are deliberate actions involving tools that make marks. Gardner (1980) describes his own eighteen-month-old son's actions in searching for a pen that works to make a scribble, suggesting that the mark making was deliberate rather than just a by-product of physical movement. The development of graphic representations in drawings is paralleled with the physical ability to control hand movements and the cognitive ability to use and portray symbols. Physical, cognitive and socioemotional developments occur at a rapid rate during the age period of four to nine-years-old, as does the use of drawing to communicate, retell experiences and to make sense of their world.

### **Physical Development and Drawing Development**

Between the ages of three and six years children develop their motor skills to

meet a wide range of goals and the development of fine motor skills allows for greater precision and dexterity (Santrock, 1997). Increasingly delicate hand and finger movements allow for the development from smears and expressive scribbles to shapes and figures that represent real or imagined objects. Cognitive growth must accompany physical growth to facilitate a move to representational drawings.

### **Cognitive Development and Drawing Development**

Between the ages of three and six years children start to develop an understanding of groupings and relationships, and to process information about their social and physical world. Language development is rapid and most children by the age of six can express not only their wants and needs, but also their thoughts and experiences. Cognitive development also influences language development and Vygotsky suggested that from the ages of four to eight years there is a move from private language to using language as a means of classification, representation and planning (1962, cited in Slavin 1997).

As language develops, children begin to use words and mental symbols to develop concepts and thoughts about their world and experiences, and at the same time lines and marks begin to become stable in representing known subjects and objects. Paralleled with this is the use of marks to represent letters and words, often in the form of names and ages. There is a progression in stages of drawing as children are able to form symbols and images that represent their world (Gardner, 1980; Goodnow, 1977; Lowenfeld 1959; Wilson & Wilson, 1982). Research on drawing progressions generally identifies elements of children's drawings over a large sample, and identifies commonalities between drawings. While researchers have categorised the drawings under differing perspectives it is generally accepted that children progress through recognisable and overlapping stages. These stages will be discussed more fully later in this chapter.

### **Socioemotional Development**

Between the ages of three and six years children learn socially appropriate ways of interacting and the rules and expectations associated with their roles. Children are active in the construction of meaning and they can understand others' points of view (Cox, 1991). Social interactions with family and peers provide children with "a sense of self and moral values attached to the self" (Emde, Biringen, Clyman & Oppenheim, 1991, cited in Smith 1998, p. 121), and Smith suggests that

contact with peers is a “crucial factor in developing self-concept or self-esteem” (1998, p. 123). By middle childhood, children are concerned with mastering new tasks and understanding how things are made and work (Elkind, 1994). It is during this time there is a clear shift away from relying on parents and towards peer relationships (Smith, 1998). Therefore messages and interactions amongst children are an important aspect of a child’s experiences and must be considered in relation to their drawing self-efficacy.

From the age of three, sexual stereotypes develop, as children are aware of their sexual roles (Elkind & Weiner 1978). Girls and boys also tend to occupy different play spaces and preferences, as their choices reflect masculine and feminine stereotypes (Elkind 1994; MacNaughton, 2000). Furthermore, observations suggest that boys are more interested in things, and girls are more interested in people (Elkind & Weiner 1978), and social orientation and aggressiveness amongst young children reflect sex differences, with boys showing more aggressive and exploratory behaviour than girls. MacNaughton (2000) used a feminist poststructuralist perspective in an eighteen-month action research study, to explore gender issues and power relationships in early childhood. The study highlighted different power structures and experiences for boys and girls. For example, boys controlled their space through physical aggression, while girls tended to use language. MacNaughton and others (e.g., Walkerdine 1981; Dunn & Morgan 1987; Davies 1889a; Danby 1998, cited in MacNaughton, 2000) suggested that play in western cultures is a re-creation of patriarchy, and the social structures of the kindergarten can be said to mirror the patriarchal society. Kolberg (1966, cited in Ebbeck, 1998, p. 29) hypothesised that “once children realise their status as males or females is permanent, they become motivated to master the behaviours and attitudes typical of their gender.” Children develop gender-type preferences and behaviours that are strongly manifested in gender segregation and this is a powerful developmental phenomenon because it occurs so frequently and increases over time (Martin, 1994, cited in Ebbeck, 1998). Gender-type preferences may impact on the activities children choose to do, and their emotional response to the activity. Therefore the relationship between preference for art activity and factors of gender and age are worthy of scrutiny in this research.



## Stages of Graphic Development

The developmental and cognitive psychology approach has been a driving force behind the collection of vast numbers of children's drawings, which have been analysed to identify characteristics of children's drawings. The Rhonda Kellogg Child Art Collection, for example, was collected between 1948 and 1970 and comprised about two million pieces of art. A wealth of literature and research exists that deals with the link between developmental stages of drawing and representation of ideas (for example, Butterworth, 1977; Di Leo, 1977; Eisner, 1972; Gardner, 1980; Kellogg, 1979; Lowenfeld, 1959; Piaget & Inhelder, 1959; Wilson & Wilson, 1982).

It is not necessary to fully outline drawing developmental stages for this research but a basic outline helps to orientate the reader to the types of drawings children produce. Viktor Lowenfeld in 1947 outlined the following stages:

Scribbling (ages 2 – 4)

Pre-schematic (ages 4 – 7)

Schematic (ages 7-9)

Dawning Realism (ages 9-11).

It is perhaps easier to understand the stages of development if related to everyday observations. Young children have the ability to make marks as fingers explore food spread over highchair trays, or mud marks on walls. At about the age of one, children are able to grasp a chunky marking implement and make lines and shapes. These scribbles gain form and combine to make complex designs. The first representational drawings are often of people and have a tadpole quality with lines emanating from a circle to represent arms and legs.

At approximately age three children start drawing representational figures that include images of people. Their drawings show an initial system of representing and using space, showing for example which way up the picture is to be viewed. By the age of four, many children are able to differentiate the human figure to represent a head and body, facial features and sometimes clothes. At this age children extend their drawing vocabulary to include marks representing animals, houses, places and nature. They are able to use similar arrangements of lines and shapes to represent a multitude of images. For example, a similar circular shape with spikes may represent hands, flowers, an octopus or the sun. By age five or six children often draw base lines to represent the ground and sky with the sun at the top and grass the bottom.

Figures become recognisable and children use familiar drawn forms to represent a number of items in different contexts.

Around the age of seven children draw with a sense of realism as they represent what they know rather than what they see. For example a chair may be drawn showing all four legs. Around the age of eight children become aware of visual realism and experiment with perspective, shading and expression. Compared to younger children, these children are more likely to express dissatisfaction with their ability to draw and an increasing awareness of how their drawn images approximate real objects may influence drawing confidence (Cox, 1991).

In relation to four to nine year-old children's drawing development there are two stages at which children would be aware of a level of realism in their drawings. The first is the transition between non-representational drawings and representational drawings, and the second is when children are aware of how their drawing approximates the real objects (Cox, 1991; Lowenfeld, 1959; Gardner, 1982). In terms of this research messages linking scribbles or realism to levels of self-efficacy would be worthy of note. Likewise, as children grow older and have more academic and non-academic experiences their self-concepts become more differentiated and less positive (McInerney & McInerney, 1998), and comments about competence in other areas may be linked to drawing self-efficacy.

## **Drawing and Art Education**

### **2.08 Research on Art and Realism**

For some writers the stage in which children are aware of the extent to which their drawings approximate real objects, is a time to lament as "unique style takes a back seat to the collective understanding of what is good and right in drawing" (Bleiker, 1999, p. 50). Gardner (1980) describes children as "sinking into the doldrums of *literalism*" (p. 148). But laments aside, what are children able to represent in terms of realism? Reith (1997) suggests that children are able to represent what they know is there, 'intellectual realism' and progress onto a view specific appearance that has 'visual realism'. According to Reith, understanding pictorial representation comprised two aspects: distinguishing between the drawing and the actual object, and distinguishing between the features of the drawing and the



features of the object. Ability to do the second would suggest access to a tool that allowed for constructive modifications to drawings to achieve greater realism.

Research projects undertaken by Reith in 1987 and 1990, that involved five to eleven-year-old children, investigated the relationship between children's drawing performance and their ability to differentiate the two aspects of picture realities. In the 1990 study, children were asked to compare and classify representational drawings of the same objects. At age five children were only interested in the content of the drawing. At age seven children considered the drawings in relation to the real object, and at nine they also compared drawings to each other. At age eleven the children were aware of all these aspects, and showed understanding of the surface structure of the drawing, and were able to comment on different methods of presentation. These findings suggested significant correlations between representational awareness and drawing performance, and children who showed a more advanced understandings of representational awareness than their age mates tended to have more sophisticated drawings (Reith, 1997).

In the 1987 study, children were asked to copy a representational and non-representational drawing. Results showed that until age seven, children were more able to accurately copy the non-representational. Knowledge of the actual topic or object was the prime feature for younger children, while older children were able to consider each mark in relation to others and build a fairly accurate copy.

In relation to this research these findings suggests three things. Firstly there is validity in the assertion that children are aware of reality in their drawings at about age eight or nine, and secondly, in the right environment they can apply this knowledge to accurately represent real and non-representational objects. Thirdly, even without external comment from adults, children at age eight or nine are aware of how their own, or their peer's drawings approximate the real thing. In a culture that values realism in art, people who produce a high degree of realism in their drawings will receive positive messages about their drawing competency. People will also judge their own ability to draw on their ability to create realistic images.

This third point was explored by Hamblen who claimed "predispositions for the aesthetic are based on socially relative learned expectations" (1984, p. 21). Although directing the advice to an older audience the following was relevant to any young artist with a growing awareness of cultural expectations in art: "Within any

given society, the creators and viewers of art are socialised to more or less agreed upon aesthetic codes and conventions” (p. 21). Hamblen proposed that a greater familiarity with cross-cultural and historical art expressions would help students understand the socially constructed nature of artistic creation and response. In terms of messages influencing drawing self-efficacy, socially constructed responses to art would be most positive for those who create socially acceptable images. The topic of the drawing may influence responses and certain topics may be regarded as more acceptable or unacceptable for children to draw. These topics may reflect gender preferences. For example it may be more acceptable to draw a family scene than a fight scene. Realism and recognisable images are also two commonly valued characteristics of drawings.

Freeman (1997) suggested that the pressure to create a picture that was recognisable to others may have accounted for findings in research involving five-year-olds drawing innovative pictures. The research was devised to allow for inference about the internal resources that children used to make a pictorial innovation. In one study 65 five-year-olds and 62 nine-year-olds were asked to draw a man that did not exist. Freeman found that the majority of younger children used an external model, such as a ghost or monster, while the majority of older children used internal models. In another study, 46 five-year-olds were asked to draw cross-categorically, that is draw a man-house or a man-animal. In contrast to the first study where only 8% of younger children attempted cross-category drawing, 28% of the five-year-olds were able to draw cross-categorically. They had more success with the man-house drawing than the man-animal one, yet the first might be regarded as the more challenging topic. Of those children who succeeded in just one drawing 75% did so with the man-house. Freeman (1997) suggested that this drawing topic was more easily recognised as having two distinct features and “fear of failing to secure the recognitions is responsible for the five-year-olds’ caution in innovation” (p. 32). Therefore the assertion that children between the ages of four and nine go through two stages of recognising realism in their drawings has some validity and it would appear that it matters to young children if their drawings are recognisable.

Despite the pressure to draw images that are recognisable, and the importance placed on how to use line to represent letters and numbers, the teaching of drawing is regarded as highly contentious. Some would suggest that the differences between the

kindergarten and school environment are influential in the development of drawing self-efficacy. There are fundamental differences in the perspective applied to the development of drawing and art skills in kindergarten and school with regards to whether artistic abilities should be left to develop naturally or be nurtured.

## **2.09 Research on Approaches to Art Education**

Kindergartens develop programmes based on activities seen as appropriate for the age and developmental stages of the children. However there is some debate about how sacrosanct 'developmentally appropriate practice' is and how this approach can incorporate new ideas of teaching and learning into older methods in which the child dictates the programme (Gifford, 1994). A review of research by Dunn and Kontos (1997), most of which was undertaken in America, found conflicting results with regards to academic performance in the developmentally appropriate programme as compared to a didactic one. Their review on research did not consider the arts programme.

The conflict between the schools of thought that support the notion of natural developmental growth or nurtured guided growth of artistic development is apparent in the literature. Gardner (1982) for example, considers 'unfolding or teaching' while Freedman (1997) considers stage-by-age developmental models versus expert-novice models for artistic development. Likewise a major theme which runs through many discussions on education, that straddles the early years to primary school, is that of the conflicts and similarities of the Piagetian and Vygotskian perspectives (Göncü, 1993; Rogoff, 1990; Dockett & Perry, 1996).

The natural and nurturing views of artistic development can be widely diverging. Gardner (1982) likened the natural or unfolding model to one in which the child was seen as a seed with a natural kernel of artistic creativeness. The role of the teacher or adult was that of protector, saving the child from the destructive forces of society. On the other hand the directive or skills approach to teaching art was one in which the child was like an abandoned seedling who, without help from gifted teachers will never achieve their potential. Gardner noted that although the developmental model was applied to artistic development in an educational setting, Piaget was 'not interested in creativity as it is usually defined, or the arts' (1982, p. 211). However, Gardner pointed out that the arts are integrally and uniquely involved

with symbol systems. Between the ages of two and seven, children have the capacity to comprehend and use a vast array of symbol systems and most children do seem to be driven by some internal dynamism. By the age of seven or eight a child is able to not only enact the role of performer and artist but also one of audience. Moreover, Gardner (1982) suggested that any change after that, bringing about greater acquisition of skills, techniques, cultural understanding and knowledge about feelings and thoughts were quantitative rather than qualitative moves. Gardner (1982) suggested that Piaget did not confront the possibility that concrete operational operations were not directly relevant to the artist's task, and this notion raised two points. Firstly that artistry was not just a less developed science, and secondly, it would help explain why less scientific or primitive nations were equally capable in the field of art.

Like others Gardner noted that "enthusiasm about acquiring skills in the arts...seems lacking in most adolescents, at least in our culture" (1982, p. 215). As children at this age were developing critical skills this may have impacted on their own self-criticisms. Gardner suggested that this could be addressed by teaching the skills to critically analyse artwork at a preadolescent stage, so that critiquing was a tool rather than a hindrance. Also, children should be taught to develop art-making skills so that they can objectively see merit in their own work. Gardner concluded his discussion with the view that young children do indeed have a "kind of golden period during the first years of life in which every child can be regarded, in a meaningful sense, as a young artist" (1982, p. 216). However, he maintained that during middle childhood a more active type of intervention is called for so that children are equipped with the tools that help them to explore rather than foreclose possibilities.

While Gardner (1982) argued for aspects of both the natural and the nurtured approach to art education, the views held by teachers and parents can be polarised. On one hand there are advocates for "deliberate modelling of thinking processes" (Freedman, 1997, p. 105). On the other, a belief firmly held by some early childhood educators is that "if we provide models for children to imitate we immediately limit the child's own creativity and opportunity to create and induce feelings of failure" (McConnell, 2000, p. 23). Several pieces of research investigate approaches to art education and the beliefs held by teachers.

Gunn (2000) investigated teacher's beliefs in relation to visual art education in early childhood centres in New Zealand. The study involved 41 women participants from nine early childhood centres who responded to a questionnaire. Questions were based on reacting, using a five-point scale, to statements about the principle purpose of the visual arts programme, what teachers should mainly do and what should be the main emphasis of the art programme. These statements, in turn, linked to three approaches to art education: rote, child-centred and cognitive approach. The rote approach was one in which activities considered the nature of art, were directed by adults and were product oriented. The child-centred approach reflected a stage to age developmental approach and the teacher tended to set-up-and-step-back, with the notion of a child's creative expression being a central focus. The cognitive approach was one in which cultural contexts were considered, visual arts were important for artistic and cognitive development, and adults or skilled peers guide children. This approach can be seen as aligned to the 'nurture' approach while the child-centred was aligned to the 'natural'.

The results from Gunn's research were in keeping with the commonly expressed views. Overall the participants were strongly supportive of the child-centred approach with little support for either the rote or cognitive approach. Interestingly, and perhaps reflecting current debate, there was an even split between agree and disagree with regards to the principle purpose of art being to support artistic growth – a cognitive approach.

Lewis (1998/99) undertook a similar investigation with respect to these three approaches, in two early childhood centres in Christchurch, New Zealand. The study took a more qualitative approach, and investigated the provision teachers made for children in the art areas, how they guided them and what happened to the finished artwork. Data were collected over 12 months using participant observations and unstructured interviews. Two main themes emerged from Lewis' research: planning for art experiences and teachers' views on artistic expression. In planning for art experiences the teachers considered the children's needs in everything they did. The environment was well managed and the materials were attractive and appropriate to the children's interests, needs and strengths. The teachers supervised areas if necessary and occasionally assisted if a child asked, but generally they did not frequent the art area. In general the planning and interaction reflected an approach in



which appropriate resources and environments were set-up and then the teacher stepped back. This was in keeping with a belief in a child-centred developmental approach.

The teachers' views about artistic expression also reflected a developmental approach – aspects of creativity, expression, communication and experimentation were valued. The teachers felt ill equipped to make suggestions or critique children's art works. Although they expressed the view that talking to children about their art was important, they were seldom observed doing so. However talking to children about the art processes was more prevalent. The lack of intervention and specific guidance, Lewis (1998/99) suggested, was a product of a lack of confidence and knowledge, and possibly a pressure to conform to the status quo of developmental practice.

A focus on developmentally appropriate practice was not unique to New Zealand. Zimmerman and Zimmerman (2000) outlined three conceptions of art education in the early years that have influenced art practices and activities. The first approach took a psychological view that supported a child-centred programme, developmentally appropriate to the age of the child. In this view the child was seen as the creator. The second view was one with a cognitive developmental approach and saw the child as a meaning maker. The third approach had a society-centred orientation and emphasised development of self when arts programmes were built on resources and histories in the local community. Each of these approaches had educationally worthwhile elements, and Zimmerman and Zimmerman (2000) advocated a holistic approach that used aspects of all three. The Reggio Emilia programme (see Edwards, Gandini & Forman, 1998; Gandini, 1997; Hendrick, 1997) is one that uses aspects of all three approaches where "teachers, administrators, parents and community members all collaborate to advocate for the young child as creator and meaning maker within a community context" (Zimmerman & Zimmerman, 2000, p. 91). However, as Gandini (1997) points out, the Reggio approach, where teachers empower children to communicate with visual language before they can read and write, "has come toe-to-toe with long-held theories about developmentally appropriate practice in art education" (p. 29).

## 2.10 Research Involving Art Linked to Other Curriculum Areas

In educational settings art is sometimes promoted as a means by which other curriculum areas can be enhanced. Oken-Wright (1998) for example, suggested that children's writing and story skills could be enhanced by encouraging drawing and by writing and talking about their drawings. This type of article was typical of those found when I undertook data base searches using key words such as *drawing* or *young children and art* or searched professional journals and magazines. Research based solely on art with young children, other than reports that discussed graphic development, was elusive. Perhaps as Eisner (1999) noted, the all too often 'requests to justify our professional existence of the arts in our schools on the basis of their contribution to non-art outcomes' (p. 145) has also lead to a lack of research based primarily on the child as an artist.

In a review of research that claimed to show a relationship between arts courses and academic achievement Eisner (1999) explored the literature published between 1986 and 1996. He looked for studies that were experimental or correlative in refereed journals. Interestingly, of over 500 studies reviewed only a handful met the criteria, and in these the aim was to increase performance in other academic areas rather than the arts. He also commented that a study that was carried out by Richard Luftig in 1992-93 that was "offered up as providing evidence of the contribution the arts makes to academic achievement" showed differences that were 'statistically nonsignificant and, in [his] view, educationally trivial' (p. 149).

While finding little research that supported the claim that art improved academic achievement, Eisner questioned why art should seek to do this anyway. He argued for an educational agenda that recognised what the arts have to offer in their own right, and outlined ways of thinking about what the arts contribute to a person's education by identifying three tiers. These are arts-based outcomes related to the subject matter that the arts are designed to teach, arts-related outcomes germane to the aesthetic features of the general environment, and ancillary outcomes like the effects of arts education on students' performance in other academic subjects.

In relation to the first two tiers Eisner (1999) suggested four significant outcomes. Firstly "students should acquire a feel for what it means to transform their ideas, images and feelings into an art form" (p. 155). Secondly "arts education should refine the students awareness of the aesthetic qualities of art and life [so they] learn to



use an aesthetic frame of reference to see and hear" (p. 156). Thirdly "arts education should enable students to understand that there is a connection between the content and form that the arts take and the culture and time in which the work was created" (p. 156). Lastly students should develop dispositional outcomes such as willingness to imagine possibilities, to explore ambiguity, and the ability to recognise and accept multiple perspectives and resolutions.

## 2.11 Summary

Research suggests that eight to nine-year-olds are aware of reality in their drawings. According to Reith (1997) understanding pictorial realism was comprised of two aspects, intellectual realism and visual realism, and research with five to eleven-year-olds suggested a relationship between children's understandings of pictorial realism and their drawing performance. Children as young as five have shown a reluctance to draw innovative pictures and Freedman (1997) suggested that fear of creating a picture that was not recognisable might have accounted for this

Gardner (1982) tended to support the notion of the young child artist as naturally and internally motivated to develop, and the older child as lacking enthusiasm for drawing. The commonsense view that the change in motivation was due to teacher style or intervention was not examined, although the conflict between the notion of natural development versus nurtured guided development was discussed (for example Gardner, 1982; Freedman, 1997). Gardner (1982) suggested that while younger children may benefit from natural development, older children would benefit from more active intervention, and the teaching of art critiquing and analysis skills.

Gunn (2000), investigated teacher's visual art education beliefs in nine early childhood centres in New Zealand, and concluded that overall the participants strongly supported the child-centred approach and gave little support for either the rote or cognitive approach. There was also an even split between agree and disagree with regards to the principle purpose of art being to support artistic growth – a cognitive approach. Lewis (1998/99) undertook a similar investigation in two early childhood centres and two main themes, planning for art experiences and teachers' views on artistic expression, emerged. In general the planning and interaction reflected a child-centred developmental approach, as did the teachers' views about

artistic expression. The teachers were happy to talk about the art process but felt ill equipped to make suggestions about children's art works and seldom did so.

In an educational setting art was sometimes promoted as a means by which other curriculum areas could be enhanced, however there was a lack of arts-based research. Eisner (1999) argued for an educational agenda that recognised what the arts had to offer in its own right. Art has much to offer children in terms of arts subject matter and provides students with the means to transform ideas into art forms. The arts promote aesthetic awareness, culturally and historic understanding of the context of art, and a disposition to explore possibilities and ambiguities. These aspects of intellectual and creative endeavour are often not valued or realised and many older children express a reluctance to draw. This research is important as a starting point for further investigations of arts-based viewpoints, with a focus on drawing self-efficacy. It is hoped that this research will spark interest in further research and discussion on developing arts self-efficacy, and lead to educational practices that will enhance children's arts-based experiences and efficacy.

## **Research Questions**

### **2.12 Research Questions**

This review of literature has highlighted the lack of arts-based research and investigations that explore the development of self-efficacy beliefs in the visual arts. While visual arts are an integral part of a child's cognitive development, and integrally and uniquely part of our symbol system, little is known about the forces that shape children's drawing self-concepts. Research and discussion supports the suggestion that children become reluctant to create innovative drawings as they mature, and children are influenced by cultural factors (Wilson & Wilson, 1982; Cox, 1992), and the value placed on art (Freedman, 1997; Hamblen, 1984).

The commonsense view, that schools and teachers are responsible for children's change in drawing attitudes, suggests that teachers act as agents for society's values and stifle natural creative growth. Therefore the developmental approach of early childhood education is seen by some as supportive of creative growth, while the nurtured or guided approach is seen as damaging to children's creativity. Some research in New Zealand has explored teacher's beliefs about the nature of visual art education in early childhood education, and found support for the

child-centred approach (Lewis, 1998/99; Gunn, 2000). However, at the same time many of these teachers supported the notion of supporting artistic growth but did not have the confidence or experience to comment constructively on children's art.

In general, teachers' feedback for children is seen as an important source of efficacy information. Research has shown that comments by teachers will impact on a child's response to a task, and their reactions to others (Weiner, 1994, cited in McInerney & McInerney, 1998; Graham, 1988, cited in McInerney & McInerney, 1998; Schunk, 1981, cited in Pajares, 1996). However, despite the suggestion that teachers negatively impact on children's drawing confidence, there has been no investigation of messages, and how these impact on children. There is also a need to understand children's visual arts experiences, and how they view these experiences. Central to the notion that children's performance in visual arts is strongly influenced by the messages they receive, is the belief that a person's confidence level impacts on their performance. Therefore self-efficacy theory (Bandura, 1977, 1986, 1995, 1997), provides a foundation for understanding children's experiences and actions.

This research will provide insights into the drawing experiences of children, and the relationship between messages and drawing self-efficacy. This research is important in shifting the focus from interpreting children's experiences from an adult perspective, to understanding the child's point of view. This study seeks to provide a clearer understanding of the mechanisms that mediate a child's drawing self-efficacy and addresses the following research questions:

1. What are the drawing self-efficacy levels of a group of four to nine-year-old children?
2. What is the relationship between gender and drawing self-efficacy?
3. What is the relationship between year levels and drawing self-efficacy?
4. What themes emerged from the observations and interviews?
5. What are the sources of drawing self-efficacy information?
6. What is the relationship between gender and messages?
7. What is the relationship between year level and messages?
8. What is the relationship between drawing self-efficacy and these messages?

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter, which is divided into three sections, describes the methodology used to investigate the research topic. The first section, research models, discusses the nature of the research topic and how this influences the decisions made about appropriate research models. Ethical considerations are discussed. The second section documents the development of the questionnaire. Concepts associated with social cognition theory (Bandura, 1986) were linked with art experiences to form the basis of the questionnaire, which was piloted and modified. The third section, the research methods, considers the selection of participants, the researcher-participant relationship and the nature of the questionnaire, interviews and observations. Preparation for and the undertaking of the research methods is documented. Issues of reliability and validity are discussed and data analyses methods are outlined.

### **Research Models**

#### **3.01 Research Topic**

The idea that negative messages received from teachers and adults are responsible for diminishing drawing self-efficacy was often expressed as a commonsense view. This view, with the child as the passive recipient and the adult/society as the active aggressor, did not account for children's active involvement in their own social interactions, actions or constructions. A view that places children as the ignorant amongst the knowledgeable mirrors the dominant ideology of our society. Elkind (1994) points out "not only was the adult bigger and smarter [than the child], he or she has all the power and the authority in the relationship" (p. 111). The challenge then is to engage in research that acknowledges and respects the messages of children and the discourses in which they engage.

One may question if an adult can do justice to interpretations of the child's world. This dilemma is not new in research. In feminist research some would claim that male researchers cannot make important contributions, however Harding (1987) suggests that a feminist is one who satisfies certain standards, be they male or female. Likewise I must accept that while it is difficult as an adult to do justice to a child's

perspective, I must attempt to represent their experiences honestly. As in feminist research I will attempt to render the invisible visible, that is to make the child's experiences central to an understanding of drawing self-efficacy.

This study investigates the drawing self-efficacy of a group of four to nine-year-old children and the messages these children gave and received in relation to the activity of drawing. The study investigates links between drawing self-efficacy and messages, between drawing self-efficacy and gender, and between drawing self-efficacy and year level. This study provides some insights into kindergarten to year four educational practices and the experiences of children, and the impact these may have on drawing self-efficacy. Research models and methods provide for both broad insights into children's experiences and in-depth insights into individual's experiences.

### **3.02 Research Model**

#### **Fieldwork**

This research called for fieldwork that acknowledged the social setting in which children experience drawing and develop self-beliefs. Although limited by time constraints, and therefore not strictly ethnographic in nature, this research was informed by ethnographic principles. Ideally ethnographic research is a long-term immersion process. Burns (1996) suggested that "by means of participant observation, the activities of people, the physical characteristics of the social situation, and what it feels like to be part of the scene were observed" (p. 304). The purpose of ethnographic research is to provide a "rich, detailed verbal description of how members of a culture perceive the culture" (Crowl, 1996, p. 11) and in an educational setting the classroom and school can be conceptualised as cultural entities.

There is now a strong tradition of educational research that has moved away from the concept of the universal child who is compared with the norm. Emerging paradigms have recognised childhood as a social construction which cannot be separated from other variables such as class, gender or ethnicity. Furthermore "childhood and children's social relationships and cultures are worthy of study in their own right" (James & Prout, 1990, p. 4). Direct link to childhood experiences encourages the researchers "to focus on the ongoing roles which children play and

meanings they themselves attach to their lives" (James & Prout, 1990, p. 5).

Although young children may use symbols and schema that are highly personal to them, children's social settings influence symbol and schema development. Bronfenbrenner (1995) refers to the ecological nature of the individual as they interact with their immediate environments, which in turn is mediated by the forces of the larger world. This study is informed by the view that drawing is both natural to children, and influenced by social forces. The teacher and the students are recognised as major players in the social environment of the classroom. Parents, siblings, friends and significant adults are seen as important in a child's out of school experiences. One set of experiences mediates the interpretation of other experiences and collectively all experiences impact on how a child views their world and their place in it. Within an ethnographic approach, and acknowledging the ecological nature of interactions, there is greater scope for exploring how a child creates and produces their own knowledge. Such insights, Smith (1998), suggests, will provide a "richer and more meaningful understanding of effective contexts for children's development" (p. 71). These insights might be gained through deliberate and systematic interviews and observations.

Interviews allow children to express their views, ideas and feelings about the research topic and to initiate their own agendas. Observations allow for an understanding of the natural social setting in which children act and interact. Observations should actively involve the researcher in recording detail about behaviour, and the environment in relation to that behaviour. Attempts need to be made to record observations with both vividness and accuracy to allow for communication and verification with other readers. This can be described as "thick description" and "places the consumer of qualitative research personally and vividly in the setting the researcher observed" (Drew, Hardman & Hart, 1996, p. 426).

Burns (1996) outlines the ethnographic research cycle. "One starts by making broad descriptive observations, trying to get an overview of the social situation and what goes on there. Then, after recording and analysing the initial data, research narrows and begins to make focussed observations. Finally, after more analysis and repeated observations in the field, investigations narrow still further to make selective observations" (p. 304). This approach provides the basis for this research project. However with cognisance of time constraints the research model for



this study needed to identify children for focussed observation.

### **Quantitative and qualitative approaches**

Pajares (1996) advocated a combination of quantitative and qualitative approaches to better establish how efficacy beliefs develop and influence behaviour. Reichardt and Rallis (1994, p. 11) also suggested that "a complete understanding of human nature requires more than one perspective and methodology. The qualitative and quantitative traditions can provide a binocular vision with which to deepen our understanding." Therefore it was appropriate in this research to use both quantitative and qualitative approaches and a combination of questionnaires, interviews and observations was used to gauge drawing self-efficacy levels, elicit child-generated issues and observe children in a natural setting. However, in the absence of a previously developed questionnaire one was developed, as discussed in the next section of this chapter.

### **Role of the researcher**

The premise that a competent observer is able to reliably interpret the words and actions of another is basic to qualitative research. However, as Denzin and Lincoln (1998, p. 23) point out "poststructuralists and postmodernists have contributed to the understanding that there was no clear window into the inner life of the individual. Any gaze was filtered through the lenses of language, gender, social class, race, and ethnicity." Therefore the researcher and the participants impact on the research process.

Adult researchers who interact with child-participants need to acknowledge the personal and the social aspects of this relationship. When an adult interacts with a child a certain power relationship exists that reflects the social structures of wider society. A poststructural view sees the relationship between social institutions and individuals as inseparable. In the early childhood setting MacNaughton (2000) suggests that the child reads and interprets their experiences through the limited alternatives made available to them. As adults are often in a position of authority over children, the researcher-participant is an important consideration in developing a research method. This will be discussed fully in the third section of this chapter.

### **Ethics**

Approval for the research was gained from the Massey University Human Ethics Committee. Ethical issues such as access to participants, informed consent



from children, teachers, parents and boards of trustees, rights to decline, and issues of confidentiality and anonymity were taken into account. Information sheets were provided for the children, their parents or caregivers, and the Board of Trustees and staff involved (Appendix A). Consent forms were provided for the children to participate in questionnaires (Appendix B), interviews (Appendix C), and observations (Appendix D). Consent forms were provided for the children's parents or caregivers (Appendix E), the staff involved (Appendix F), and the school Board of Trustees (Appendix G).

## **Questionnaire Development**

### **3.03 Developing A Questionnaire**

#### **Linking Past Research to the Questionnaire**

This study involved almost 140 children and the questionnaire needed to reflect key concepts and indicators of drawing self-efficacy. The questionnaire needed to be easily managed by children aged between four and nine-years-old and allow for a range of responses that could be translated to numerical values. Research in the area of self-concept in academic settings and curriculum areas, other than the visual arts, provided insights into ways of developing a questionnaire. The drawing self-efficacy questionnaire (see Appendix H) was developed after a review of literature on self-efficacy and Bandura's (1986) social cognition theory. Self-efficacy is one's belief in the ability to accomplish a certain task and perceived self-efficacy involves a generative capability where action is organised to meet a purpose. Therefore preferences can be an indicator of self-efficacy as people exhibit behaviours and reactions related to their self-efficacy (Bandura, 1986). These reactions and behaviours were discussed in the Literature Review (pp.10-11), and sections and questions were developed to reflect these. A summary of the links between the theory and the questionnaire items appears in Appendix I. In addition to reactions and behaviours Bandura (1986) suggested four main sources of self-efficacy information. These sources of information are performance attainment, vicarious experiences, verbal persuasion and physiological states. These four sources of self-efficacy information also provided a framework for sections and questions in the questionnaire (see Appendix J).

A related concept is that of *locus of control*. People with an internal locus attribute results to their own efforts and abilities, while those with an external locus relate success or failure to luck, the task, and the actions of others. As discussed in the literature review this concept does not necessarily indicate self-efficacy beliefs but a relationship between the two is of interest. Therefore questionnaire items 31 to 33 related to locus of control.

In summary, as a result of the literature review the following sections featured in the drawing self-efficacy questionnaire.

- A. Performance attainment beliefs and verbal persuasion.
- B. Preferences
- C. Vicarious experiences
- D. Emotional responses
- E. Effort and persistence
- F. Strategies for drawing
- G. Locus of control
- H. Level of difficulty

### **Questionnaire Pilot Study**

The same questionnaire was used for all children. Working with young children required patience and good communication skills and the questionnaire was written in a form that the children could follow visually as it was read to them. As a starting point a questionnaire aimed at eight-year olds was developed and piloted with several children aged between four and eight-years old and modified accordingly. Following the initial trials the questionnaire was modified in a number of ways. Firstly, the first two sections related to the art making processes in general, with links to drawing. This allowed easy adaptation to the kindergarten environment, where children engaged in a variety of activities, including drawing. Secondly, all questionnaire items were rewritten as questions. This allowed for a positive or a negative response and then a degree of response. The questionnaire was piloted with six children, aged between four and eight years, and modified after each trial. The trials reaffirmed the need to read each question to the participant so that it was clearly understood. Following the trials, and discussion with experienced researchers and colleagues, four other modifications were implemented. Firstly, words that the children had difficulty interpreting were changed to ones that are more easily

understood. Secondly, some questions were reworded to allow for a negative tone. For example: 'Do your friends say bad things about your drawings and the art you do?' Thirdly, the sequence of possible responses was varied. Lastly, the decision was made to verbalise questions and record the responses from all children in a one-to-one situation, to minimise social pressures or literacy difficulties.

With the exception of the first questionnaire, which was undertaken at a tertiary institution, all the trial questionnaires were undertaken in the children's homes with their mothers in earshot. Following the questionnaire, and with permission from the participant, I discussed the responses with their mother and the conclusions that may be drawn about the child's drawing self-efficacy. In each case the parent felt the summary fairly reflected their own impressions although some answers surprised them. For example, several children said they didn't do much art or drawing at home but the mothers felt they did quite a lot. In this case the child's perceptions were taken as valid, as an indication of the importance or otherwise that they place on the activity. While the main research project did not have time provision for involving parents, this early interaction was valuable as a source of feedback. Research in the area of mastery motivation of young children showed that parents' ratings of children's mastery motivation was more predictive than were the teacher's ratings (Hauser-Cram, Krauss, Warfield & Steele, 1997, cited in Hauser-Cram, 1998). Therefore the parents' reactions to the responses and interpretations were an important source of feedback.

### **Final Questionnaire**

The final questionnaire comprised 36 questions (see Appendix H). Twelve of the questions had a positive tone, using such terms as *good, like, happy, want to* and *good at*. Fourteen questions had a negative tone allowing children to respond to such terms as *trouble, problems, unhappy, sad, cannot draw* and *say bad things*. Ten questions had a neutral tone, using such terms as *would you rather*. Twenty-seven questions asked the child to choose between a positive or negative response, and then to indicate a degree of response. Three questions asked the child to select from a four-point scale, five questions required either/or responses and one asked the children to nominate people they thought were good at drawing. All sections of the questionnaire were informed by Bandura's social cognition theory (1986) in relation to self-efficacy.

## Research Methods

### 3.04 Selection of Participants

The research, which focused on four to nine-year-old children, involved kindergarten to year four children. For ease of accessibility, and to draw from similar social backgrounds, a school and a kindergarten close to each other was selected – Eastbank School and Campbell Kindergarten. All the children, who attended the morning session at Campbell Kindergarten, and new entrant to year four children of Eastbank School, were invited to participate. Children were asked for personal and parental consent before the research process began. Table 1 shows the total number of children at each site, the number who gave consent and the number of children subsequently involved in each process.

**Table 1. Number of Children Involved in Research Processes**

	Children	Consent obtained	Questionnaire	Interview	Observation
<b>Kindergarten</b>	45	33	21	6	28
<b>New Entrants</b>	16	13	13	5	5
<b>Year One</b>	25	23	22	8	4
<b>Year Two</b>	28	28	28	5	3
<b>Year Three</b>	27	22	22	7	4
<b>Year Four</b>	30	30	30	4	4
<b>Totals</b>	<b>171</b>	<b>149</b>	<b>136</b>	<b>35</b>	<b>48</b>

### 3.05 Researcher-Participant Relationship

Consideration was given to specific issues and aspects associated with developing a researcher-participant relationship with four to nine-year-old children. Firstly, there were distinct differences between the kindergarten and school environment. Secondly, children should not feel pressured to participate. At the same time children needed to feel appreciated when they did participate. Thirdly, children

needed to feel safe within the research process and able to exercise some control over the process. They needed to have direct and honest answers to their queries. And lastly, the researcher-participant relationship should offer the children an alternative model of adult-child interaction to the traditional teacher-pupil one. These points will be discussed in this section.

### **Researching in a Kindergarten and School**

Apart from age differences the main difference between working with kindergarten and school children was the issue of free choice versus expected-compliance. In the kindergarten setting children were free to select their activities and participating in research competed with many interesting options. As some children became comfortable with me, and chose the one-on-one interaction, participation become more attractive to others. However, as children could choose to talk about art or engage in art activities, those with low drawing self-efficacy in art were not likely to choose to do so (Bandura, 1986, 1997). As 21 of the 45 kindergarten children responded to the questionnaire, over half chose not to participate. On the other hand 92% of all school children consented to involvement, and all but one of these children responded to the questionnaire.

Apart from younger children taking a little longer to respond to questions, and digressing more often, all age groups appeared comfortable with responding to the questions. All children had the questions read to them, in a one-to-one interaction. Children responded enthusiastically to my genuine interest and the processes provided positive experiences. Only one question, in the section on locus of control, seemed to confuse children of all ages, so often question 33 was read several times before the children chose an option. One important backup, especially with the younger children, was to record the responses on audiotape so that the best-fit replies could be reassessed very soon after the event.

### **Children's Rights: Participation and Appreciation**

It was important that children did not feel pressured to participate in the research, and that they felt appreciated when they did. While at the kindergarten the children could freely choose to interact with me, it was also important that some level of free choice was maintained at the school. Although all participants had given their consent, this did not oblige them to participate and teachers took care not to *send* children to me. Instead children were invited to join me and could decline, or say they

would like to see me on another day. I began each session by telling the children I was very interested in what they thought about their art and drawing, and they were very kind to give me their time and efforts. In a society in which children are often expected to conform to adult expectations without question, or thanks, I felt this was important. Also by way of thanks all children could choose a sticker at the conclusion of the session. Children who did not answer questions were also invited to have a sticker and while the stickers were not given as a form of bribery, two four-year-old children delighted in telling me that they participated so they could have another sticker. However the lively interaction during the session suggested that the activity of responding to questions was in itself an enjoyable experience for the children.

### **Establishing Safe and Trusting Relationships with Children**

Children need to feel safe, have some level of control, and engage in honest and open interaction with adults within the research process. When children participated in a questionnaire or interview I would ask them where they wanted to sit. At the kindergarten this usually meant sitting in the teachers' area which provided visual access to both the outside and inside area. Research was undertaken over spring and early summer, and at the school we had the choice of several inside and outside areas.

When observing children in their classrooms I would sit fairly close so that I could see the child and their surrounding friends and environment, and be party to any verbal exchanges. At times the children would ask me what I was writing. On these occasions I would read aloud the last sentence that I had written that was of a general nature or involved them. The children seemed comfortable with this and after the first few questions they did not ask again.

Interviews or questionnaires were recorded on audiotape. To provide some level of control for each child they were invited to push the record button and to respond to a simple question such as "How old are you?" Then they were shown how to rewind the tape and push play. Children often showed delight at hearing their own recorded voice and when asked if they were happy to have the session recorded they all consented. Then in most cases the child held the recorder and was aware that they could turn it off at any time. I told the children that I would listen to it later, to make sure I had written down what they had said, and then I would cover their voice up with another recording. The initial procedure added time to the whole session but it



was important in maintaining a relationship in which children's rights were respected.

### **Alternative Models of Adult-Child Interactions**

The researcher-participant relationship can offer children an alternative model of adult-child interaction to the traditional teacher-pupil one. Developing a special relationship with the children at the kindergarten did not prove difficult as the children were accustomed to engaging with adult visitors. In the early stages I made several casual visits to the kindergarten and observed or talked to the children while they created artworks. I made a point of not instructing them or censuring talk or behaviour. I discussed the role I would play with the teachers at the kindergarten, and we agreed that if adult intervention were needed I would quietly alert one of the teachers, rather than put myself in a position of authority.

My role in the school setting was naturally more problematic as adults in the school setting tended to have an authoritative role such as parent, teacher, adviser or councillor. I needed a trusting relationship with children that was perhaps unique from the usual adult roles at school. This relationship and role can be created, Graue and Walsh (1998) suggest, by acting neither like a child or an adult. This can be achieved in part by physically occupying spaces that adults in that setting do not usually occupy. For example as an adult visitor or teacher in the school one is likely to have lunch in the staff room or to have a hot drink during the breaks. In contrast I deliberately had lunch in the playground area with some of the children and did not drink hot drinks. I spent part, but not all, of the lunch break with the children and at times I sat with the children but only after asking permission to do so. Again the behaviour was not child-like but at the same time adults did not usually ask permission to be in children's playing space. I further promoted an image of an adult outside of the usual models by arriving at school on my bicycle and I deliberately wore conservative clothes, make-up and jewellery. I did not censure the children's actions or words although I was prepared to if a child's safety was at risk, but this did not prove necessary.

## **3.06 Nature of the Questionnaire, Interviews and Observations**

### **Questionnaire**

The questionnaire assessed children's drawing self-efficacy. Most questions had four possible responses and the responses were designated a number from 1 to 4.



A 4 was designated to a response that suggested a high drawing self-efficacy, scaling down to a 1 for a low efficacy response. In converting the responses to numerical data each child was ranked, within their class grouping and year level, for their drawing self-efficacy.

The research schedule started with the youngest children and progressed through the year groups. Before working in any class I made a point of visiting the room on several occasions so that the children were comfortable with my presence. The questions were read aloud and most prompted a *yes* or *no* answer. Then a second question gauged the degree of the response, and this was recorded.

### **Interviews**

Following the questionnaire, some children at either end of the drawing self-efficacy scale were asked if they wished to be interviewed. The nature of the questions was generated from the interaction that occurred during the interview, and provided greater insight into the questionnaire responses. Initial questions centred on the first three items in the questionnaire and on themes that were developing amongst the participants. The interviews provided a bridge between the questionnaire and the targeted observation and allowed me to assess each child's willingness to be involved in observations. Interviews were recorded on audiotape and later transferred into written form. These were not always strictly transcribed but did include some direct quotes and linked responses. The decision not to directly transcribe reflected that, initially, the purpose of the interviews was to act as a bridge between the questionnaire and observations. However as the process of interviewing unfolded I became aware of many interesting comments that signalled child generated themes. Rather than discounting responses and comments in the interviews that appeared unusual or incongruent, these were recorded word for word.

### **Observations**

Several of the children were then observed while involved in drawing activities. The school drawing sessions were scheduled into the classroom programme, and in the kindergarten the questionnaire, interviews and observations took place as children were willing to participate.

In the school setting one or two children with high drawing self-efficacy where observed along with one or two children with low self-efficacy. These children were selected from those interviewed who appeared comfortable and forthcoming in

the interview process. While the observations targeted one child, the recorded observation inevitably included observation of other children as they interacted with the selected participant. It was important that the observations were undertaken openly and that all children were comfortable with the researcher's presence.

At the school the drawing lessons, which were taught by the class teacher, were timetabled to coincide with the observation schedule. In general one set of art lessons was based on drawing people and a second set of lessons focused on drawing real and observed objects. These drawings provided opportunities for children to react to the likeness between their drawings and the real objects. The schedule for the school observations appears in Appendix K. The kindergarten structure did not allow for the teaching of art lessons as such. It was natural for children to draw and make art when at an area set up for art activities. At times a teacher would set up and facilitate an art activity such as screenprinting, monoprinting or card making, but the majority of the art activities were initiated by the children without teacher input. In the kindergarten, observations were of a general nature as children, with their permission, were observed while engaged in art activity. Some attempts were made to observe high and lower self-efficacy children, however as preference reflects efficacy beliefs (Bandura, 1986) it may be assumed that children with low drawing self-efficacy did not choose to participate or draw.

Observations were undertaken over a 40-60 minute period and took the immediate form of notes, diagrams and abbreviations. These were written up as soon as possible. Observational records included descriptions of physical appearances and environments, interactions, moods and reactions. These descriptive records allowed me to "reinsert" myself into the context of the classroom and provided a fly-on-the-wall perspective, which can raise the consciousness of teachers, parents and educators, and provide children with insights into the experiences of others. The inclusion of descriptive observations contributed towards descriptive validity (Maxwell, 1992) and allowed the reader to verify researcher interpretations or to form additional conclusions.

### **3.07 Reliability and Validity**

#### **Scope and Limitations**

The information generated by the questionnaire was limited to the scope of the items and the choice of responses available. These responses were given a numerical value that corresponded to a high or low drawing self-efficacy. This approach had several limitations. Firstly, the overall numerical total did not give information about specific areas of strength. For example one child may be high in performance attainment but low in effort and persistence, and score the same as a child who was lower in performance attainment but higher in effort and persistence. Secondly, the sections vary in the number of questions used to gain information. Therefore some efficacy indicators or behaviours may have been proportionally over or under represented. Nevertheless as the items were conceptually linked this was likely to be more valid than isolating individual items (Crowl, 1996).

#### **Triangulation**

Triangular techniques attempt to “explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and, in so doing, by making use of both quantitative and qualitative data” (Cohen & Manion, 1989, p269). This research provided triangulation by employing questionnaires, interviews and observations to explore the same research topic. The questionnaire provided initial indications of drawing self-efficacy levels and the interview and observations revealed strong links between questionnaire responses and the children’s subsequent discussions and actions.

Two other forms of triangulation were used, but appeared to have limited value when applied to the concept of self-efficacy. One form of triangulation involved linking the children’s drawing self-efficacy levels with how their peers viewed their ability. In the questionnaire and during interviews children were asked to suggest people they thought of as good at art. It might be suggested that children with high drawing self-efficacy were more likely to appear on the lists of others, however the relationship did not prove strong. For example, in the year two class 51 names were listed; of these 14 nominations belonged to children above the mean score, and 37 were below. In the year three class 37 names were listed; of these 21 were above the mean and 16 below.

The second form of triangulation involved the teachers' perceptions. The kindergarten and class teachers were asked to nominate the children they believed displayed high drawing self-efficacy, or to react to the ranking revealed by the questionnaire. The new entrant, year three and year four teachers chose to view a ranked list of names, and they all expressed the view that the ranking appeared logical. The kindergarten, year one and year two teachers were given an indication of how many children fell within a score range, and they wrote in the names of the children that they felt corresponded with these scores. There was not a consistent relationship between the children's drawing self-efficacy scores and the teacher's perceptions of these. The kindergarten teachers correctly nominated nine of the 20 children, and were one category out for another five children. This represented a 70% 'hit' rate. The year one teacher had correctly nominated only four of the 21 children, and was one category out for another seven children. This represented a relationship of 52%. The year two teacher correctly nominated four of the 24 children, and was one category out for another five children, which represented a relationship of 37%.

### **3.08 Data Analyses**

#### **Analyses of Questionnaires**

Each completed questionnaire was numbered for ease of reference and responses were given a numerical value between 1 and 4, corresponding with efficacy levels. The participants were given an overall total. Each section of the questionnaire was conceptually linked, and each subscale was given a total. The data was treated by a series of comparisons to identify statistically significant findings in relation to the research questions.

#### **Analyses of Interviews and Observations**

The interview format was semi-structured and provided a link between the questionnaire and the observations, and an opportunity to expand on child-generated themes. Notes and tape recordings were taken during the interviews and observations. Interview records were coded and analysed to reveal themes. The observations were recorded in a descriptive manner to provide insights into individual children's experiences. These records were coded and analysed for themes. The interview and observation findings were integrated and are presented in the chapters on qualitative results.

## **CHAPTER FOUR**

### **QUESTIONNAIRE RESULTS**

The primary purpose of the questionnaire was to identify the drawing self-efficacy levels of a group of four to nine-year-old children. The ranking of the scores provided the basis on which children were invited to participate in interviews and observations. This chapter reports on the findings of the data analyses of the questionnaire. This report includes analyses of the drawing self-efficacy scores in relation to year levels and gender. During the qualitative aspect of this research the child-initiated theme of the relationship between literacy skills and drawing competence emerged and an analysis of reading ages in relation to drawing self-efficacy was also undertaken.

#### **4.01 Questionnaire Structure**

The questionnaire comprised 36 questions that were grouped into eight sections of three to eight questions. The sections were performance attainment beliefs and verbal persuasion, preferences, vicarious experiences, emotional responses, effort and persistence, strategies for drawing, locus of control, and levels of difficulty. A numerical rating of 1 to 4 was equated to responses for 30 questions, with 1 given for a response indicating low self-efficacy, 2 for quite low, 3 for quite high and 4 for a response indicating high self-efficacy. Five questions required an either/or response with a 1 given for a low self-efficacy response and a 4 given for a high self-efficacy response. One question asked the children to nominate children whom they thought were "really good at art." If children nominated themselves, the response was given a 4, and if they nominated others the response was given a 1. The same questionnaire was used for all children and scores could range from 36 to 144.

#### **4.02 Research Questions**

One hundred and thirty-six children responded to the questionnaire. This generated 4,896 responses that were then coded into numerical values. Analyses of these data, along with identification of gender, age, year level, class level, and reading age provided information on three main research questions, and a fourth

research question, arose from the qualitative process. The research topic had a specific focus on the messages that children gave and received, and the questionnaire had three questions regarding the source and nature of messages. Therefore analyses of these responses were also undertaken. The following five questions are discussed in relation to the findings.

1. What are the drawing self-efficacy levels of a group of four to nine-year-old children?
2. What is the relationship between gender and drawing self-efficacy?
3. What is the relationship between year levels and drawing self-efficacy?
4. Is there a significant relationship between children’s reading ages and drawing self-efficacy?
5. How did the children respond to the questions regarding the nature of messages from friends, family and teachers?

**Drawing Self-Efficacy Levels**

The frequencies of drawing self-efficacy scores, as presented in Figure 1, ranged from 70 to 138. The mean was 109.02, with a standard deviation of 11.08. The median was 109 and the mode 117.

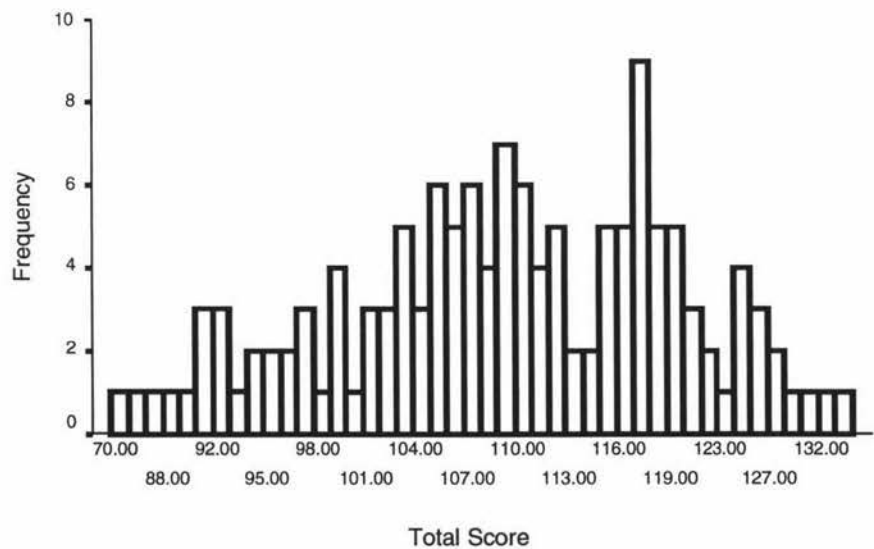


Figure 1. Frequencies of drawing self-efficacy scores for a group of four to nine-year-old children

A range of scores was clustered into bands to represent levels of drawing self-efficacy. The bands were calculated as follows: Very low self-efficacy responses for every question would generate a total of 36, while responses that consistently scored 2 (quite low) would total 72. A consistent score of 3 (quite high) would total 108, and a consistent 4 (high) would total 144. A mid-point between these scores was calculated to divide the total scores into five bands. Scores below 72 indicated a tendency to *low* drawing self-efficacy, and scores in the 72 to 89 range equated to most responses being given a 2 or 3 and indicated a tendency towards *quite low* drawing self-efficacy. Scores ranging from 90 to 107 indicated a mix of moderate positive and negative responses, suggesting a *moderate* drawing self-efficacy. Totals in the 108 to 125 range indicated a tendency towards *quite high* drawing self-efficacy, with responses equating to a score of 3. Totals in the 126 to 144 range indicated a high level of responses given a 4, and showed a tendency towards *high* drawing self-efficacy. Figure 2 displays the scores grouped into bands to reflect these levels of drawing self-efficacy.

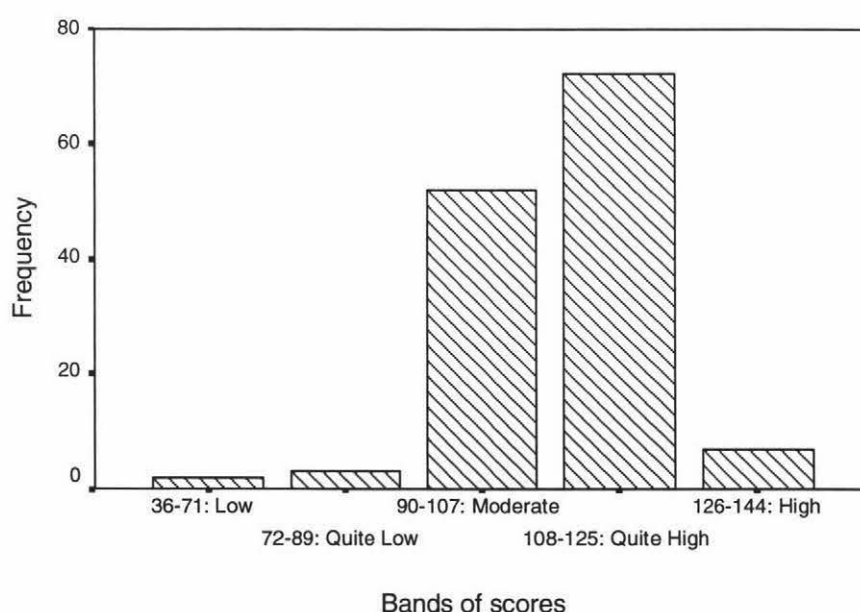


Figure 2. Frequencies of drawing self-efficacy scores in bands

Both the mean of 109.02 (SD 11.08) and the median of 109.00 were in the quite high band. Therefore half the children had quite high to high drawing self-efficacy. Ninety-six percent of the children scored above 90, which indicated a



moderate to high drawing self-efficacy. Only one child scored less than 50% of the possible total and another three scored less than a total of 90. On the other end of the scale six children, who scored above 126, achieved over 88% of the possible total. Therefore the majority of these four to nine-year-old children had moderate to high drawing self-efficacy.

**Drawing Self-Efficacy Levels, Gender and Year Level**

There were 73 boys and 63 girls in the sample. The mean for the girls was 110.29 (SD 10.27), and ranged from 91 to 138. The boys' scores ranged from 70 to 129 and had a mean of 107.93, (SD 11.69). An analysis of variance (ANOVA) was performed for Total Score to test the main effects for Year Level, Gender, and the Year Level by Gender interaction effect. The main effect for Year Level was not statistically significant,  $F(5, 124) = 1.26, p = .29$ . In terms of gender there was no statistically significant difference between boys and girls for Total,  $F(1, 124) = 2.96, p = .09$ . However there was a significant Year Level by Gender interaction effect,  $F(5, 124) = 4.94, p < .01$ . A breakdown of mean totals in relation to gender and year levels is presented in Figure 3.

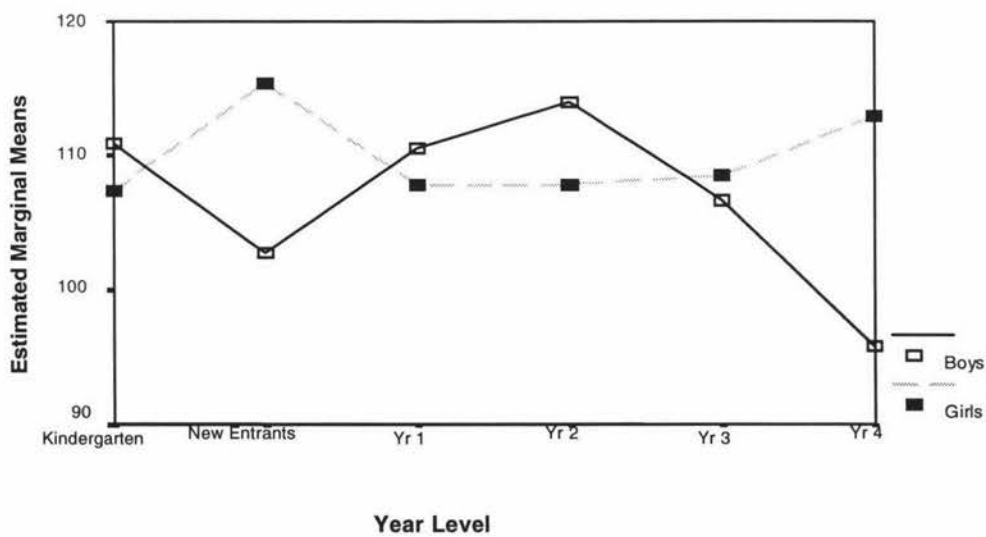


Figure 3. Mean total for boys and girls across year levels

The difference between boys and girls for kindergarten, year one and year three were assessed in terms of Effect Size. In these year groups, the Effect Size was 0.3 or less, suggesting considerable overlap in scores for boys and girls. At the year

two level boys had a higher mean than girls and the Effect Size was 0.73, indicating that the mean scores for year two boys and girls were separated by around three-quarters of a standard deviation unit. The new entrant boys scored at a level which was almost one standard deviation unit below the pooled mean and at the year four level, boys on average were at a level of 1.25 standard deviation units below the mean. These groups were likely to have contributed significantly to the Gender by Year Level interaction effect.

An analysis of variance (ANOVA) was performed to test the main effects for Gender, Year Level and the interaction effect of Gender by Year Level for each of the subscales within the questionnaire. Five of the eight subscales revealed significant differences: preferences, vicarious experiences, emotional responses, effort and persistence, and levels of difficulty.

### **Preferences**

For Preferences, a significant main effect was observed for Gender,  $F(1, 124) = 6.73, p < .05$ . Girls reported more positive preferences for art activities than boys did. There was also a significant main effect for Year Level,  $F(5, 124) = 2.35, p < .05$ . The questionnaire (see Appendix H), contrasted drawing and art activities with playing a game, reading or looking at a book, writing or telling a story, or watching television. It also asked how often children liked to draw or do art at home and school. Ranking the mean scores for preference from highest to lowest showed that year two had the highest preference response followed by year three, year four, year one, and new entrants. Kindergarten children showed the lowest preference mean. However Scheffe individual comparisons of means were conducted, to identify which specific year levels caused significant effect, and showed that none of the contrasts was statistically significant. There was no significant Gender by Year Level interaction effect,  $F(5, 124) = 1.82, p > .05$ .

### **Vicarious Experiences**

For Vicarious Experiences there was a significant interaction effect for Gender by Year Level,  $F(5, 124) = 3.13, p < .05$ , with the greatest contrast between new entrant girls and year four boys. There was also a significant main effect for Year Level,  $F(5, 124) = 3.19, p < .05$ . In general, younger children reacted more positively to vicarious experiences and believed themselves capable of achieving good outcomes if others did, than older children. However Scheffe individual

comparisons were conducted to identify which year levels caused the significant effect and showed that none of the contrasts were statistically significant. There was no significant main effect observed for Gender,  $F(1, 124) = .69, p > .05$ .

### **Emotional Responses**

Emotional Responses revealed that on average children in each year level had positive experiences of drawing. For Emotional Responses there was a significant interaction effect for Gender by Year Level,  $F(5, 124) = 4.23, p < .01$ . Calculation of the effect sizes showed that the greatest difference between boys' and girls' emotional responses to drawing was at the year four level where boys on average scored at a level which was 1.25 standard deviation units below the pooled mean. There was also a significant main effect for Year Level,  $F(5, 124) = 3.99, p < .01$ . Scheffe individual comparisons of means were conducted to identify which specific year levels caused the significant effect and the Scheffe tests showed contrasts between year two and year four were statistically significant,  $p < .05$ . The year four children had the lowest emotional response to drawing with a mean of 9.77 (SD 2.13) and the year two children had the highest with a mean of 11.11 (SD 1.03). There was no significant main effect observed for Gender,  $F(1, 124) = 1.74, p > .05$ .

### **Effort and Persistence**

For the subscale on Effort and Persistence there was a significant interaction effect for Gender by Year Level,  $F(5, 124) = 2.66, p < .05$ . Although the greatest degree of contrast between mean totals appeared at year two and year four, Scheffe tests showed that no year level contrasts were statistically significant. The main effects for Gender,  $F(1, 124) = .08, p > .05$ , and Year Level,  $F(5, 124) = 1.24, p > .05$ , were not statistically significant.

### **Levels of Difficulty**

The subscale Levels of Difficulty comprised three questions that related to confidence in drawing good pictures to go with a made up story, or a drawing of themselves and their family, or a drawing of a real and observed object. Literature on developmental stages and concepts of realism in art reports that the drawing tasks, as listed, become progressively more complex. Responses from the subscale showed the main effect for Year Level was statistically significant,  $F(5, 124) = 4.66, p < .01$ . The mean for this subscale over year levels showed a general trend towards a decline in drawing confidence as year levels increased. Scheffe individual comparison of means

was applied to identify whether any year level caused the significant effect. The Scheffe test did not reveal any statistically significant contrasts. Neither the main effect for Gender,  $F(1, 124) = .34, p > .05$ , nor the Year Level by Gender interaction effects,  $F(5, 124) = 1.96, p > .05$ , were statistically significant.

### **Reading Ages and Drawing Self-Efficacy Levels**

As the research project progressed into the interview and observation stages the theme of perceived literacy skills in relation to drawing skills emerged. While drawing skills and drawing self-efficacy are not the same thing, the fact that children were judged by their peers would be a source of self-efficacy information. This theme is explored more fully in the next chapter. In this chapter the statistical relationship between reading age and drawing self-efficacy levels is examined.

There were several limitations when using reading ages to make judgements about literacy skills and their relationship to drawing self-efficacy. Firstly, reading ages were just one measure of literacy skills. Secondly, the methods used to collect this measure were not necessarily uniform, and in one year level 55% of the children were registered as having a high reading age. Thirdly, the reading age results were based on the most recent data available at the time of the research project, but this did not necessarily reflect reading ages assessed in recent history. On the other hand, the chronological ages of the children were accurate as of the time of their involvement in the research processes. Therefore discrepancies may have existed between the reading ages and the chronological age of the child, that was a reflection of the time span between assessment and time of data collection rather than reading ability. Lastly, kindergarten children did not have reading assessments and no reading ages applied for this group. However, children in this age group made several references to drawing abilities linked to reading and writing.

To address some of these limitations the following steps were taken. Kindergarten children were omitted from the analyses so that their non-reading did not skew the results. Secondly, to account for time discrepancies, high and low reading ages were based on differences between reading age and chronological age that were greater than 0.4, which represented the period of the research and half a term. Therefore, low reading age was selected by  $[\text{reading age} + 0.4] < \text{age}$ , and high reading age was selected by  $[\text{reading age} - 0.4] > \text{age}$ . Using these calculations 35

children were placed in the high reading age group, 24 into the low and 56 children were in the group with age the same as reading age.

A three-way ANOVA (Gender x Reading Age x Year Level) was performed in order to test for significant differences of Total drawing self-efficacy scores in relation to Reading Age. Main effects for Gender and Year Level, and the Year Level by Gender interaction effects are reported above. The main effect for Reading Age was not statistically significant,  $F(2, 90) = .65, p > .05$ . Furthermore, there was no significant Reading Age by Gender interaction effect  $F(2, 90) = .51, p > .05$ . However there was a significant Reading Age by Year Level interaction effect  $F(7, 90) = 2.88, p < .01$ . There was no significant three-way interaction effect. Data suggests that at years two and three there was a positive relationship between high reading age and higher mean scores. In year four the opposite was observed with the high reading age group having the lowest total mean. Scheffe individual comparison of means was performed to identify whether any year level was associated with the significant effect and there were no statistically significant contrasts.

**Messages from Friends, Family and Teachers**

The questionnaire had three items that asked children about the frequency of positive or negative messages about art and drawing from friends, family and teachers. Table 2 shows the mean and standard deviation for these scores.

Table 2. Descriptive Summary of Responses to Questions about Messages from Friends, Family and Teachers.

	Mean	Standard Deviation
Friends	3.13	0.91
Family	3.54	0.63
Teachers	3.26	0.71

On average, families were the most supportive and friends were perceived as the least positive. Despite suggestions from a commonsense view that teachers were responsible for many negative messages about children’s art, this group of children

scored teachers higher than friends for positive comments. Teachers and friends had a mean score over three suggesting that most children experienced positive comments at least some of the time. Families were the most positive with over 94% of the children’s responses suggesting a high level of positive messages.

While these mean scores gave a picture of the children’s responses to these questions an ANOVA revealed that there was no statistically significant differences for any of these items in terms of Gender or Year Level. There was also no significant Gender by Year Level interaction effect: Friends,  $F(5, 124) = 1.18, p > .05$ ; Family  $F(5, 124) = 1.42, p > .05$ ; Teachers,  $F(5, 124) = .68, p > .05$ .

4.03 Summary

The statistical data revealed several aspects of children’s drawing self-efficacy as presented in Table 3. Findings in relation to the research questions are summarised.

Table 3. Summary of Statistically Significant Findings

Scale	Probability Levels		
	Gender	Year Level	Gender X
			Year Level
Mean Total			< .01
Vicarious Experiences		< .05	< .05
Effort and Persistence			< .05
Emotional Responses		< .01	< .01
Preferences	< .05	< .05	
Levels of Difficulty		< .01	
	Reading Age	Reading Age	Reading Age
		X Gender	X Year Level
Mean Total			< .01



An analysis of the drawing self-efficacy levels for the sample showed that 96% had moderate to high self-efficacy. Half of the children had quite high to high drawing self-efficacy. The greatest difference in effect size between boys and girls for the Total occurred at the year four level where boys scored at a level which was 1.25 standard deviation units below the mean. The new entrant boys scored at a level which was almost one standard deviation unit below the mean, and at the year two level the girls scored almost three-quarters of a standard deviation unit below the mean.

There was no statistically significant difference between the mean drawing self-efficacy total of boys and girls. However there was a significant main effect observed for the subscale on Preferences where girls reported more positive self-efficacy beliefs regarding preferences for art activities than boys. When Year Level was considered with Gender, there were statistically significant differences for three subscales: Vicarious Experiences, Effort and Persistence, and Emotional Responses. However the reason for these significant interaction effects was not clear.

While the various year levels displayed differing mean scores for drawing self-efficacy the main effect for Year Level was not statistically significant over the full scale. However analysis of subscales revealed four statistically significant subscales: Preferences, Vicarious Experiences, Emotional Responses and Levels of Difficulty. Year two had the highest preference for art followed by year three, year four, year one, and new entrants. Kindergarten children showed the lowest preference. However younger children reacted more positively to vicarious experiences and believed themselves more capable of achieving good outcomes if others did, than older children did. Furthermore responses to items on levels of difficulty suggested a trend towards a decline in drawing confidence as year levels increased. Year four children had the most negative emotional response to drawing and year two children had the highest.

A relationship between children's reading ages and their drawing self-efficacy was not statistically significant. However there was a significant Reading Age by Year Level interaction effect. At years two and three high reading ages were associated with a high drawing self-efficacy mean, and at year four a high reading age was associated with a low drawing self-efficacy. These results might suggest that



there is a link between cognitive development and a growing awareness of how drawings represent realism. Drawing and writing have commonality as symbol systems that use line to represent and communicate thoughts and experiences, and as such drawing may be a precursor to reading and writing. While this study is unable to reliably expand on this theme the link between reading ability and drawing skills may warrant further investigation.

In general, friends, family and teachers gave positive messages about children's drawings and artworks. Family was the most supportive, followed by teachers. Friends, while generally supportive, were also the greatest source of negative messages.

## **CHAPTER FIVE**

### **INTERVIEWS AND OBSERVATIONS**

### **KINDERGARTEN RESULTS**

Chapters five and six present and summarise the themes that emerged from the observations and interviews. Data collection in the kindergarten and school differed in a number of aspects. In order to place the discussion in context the findings are divided into two chapters based on kindergarten and school findings. While the culture of free choice meant that not all children participated in art activities at the kindergarten, all children at some stage undertook art activities at school. What is more, the majority of school children consented to be involved in the research and responded to the questionnaire. This allowed assessment of drawing self-efficacy levels and interviews with some children with higher and lower self-efficacy and targeted observations of children while drawing. The nature of the kindergarten environment and culture did not allow for this systematic approach, or specific sessions based on drawing. Children were observed when involved in art activities such as collaging, construction, painting, drawing and screenprinting. Also, as people make choices based on their efficacy (Bandura, 1986), it may be reasonable to assume that some children with low self-efficacy in drawing chose not to be involved in the research.

#### **5.01 Kindergarten Results**

Campbell Kindergarten was a kindergarten in a moderate sized New Zealand city. The kindergarten site consisted of one main building opening up onto a fully fenced section with mature trees and shrubs and permanent play structures. The inside area was open plan and most of the observations were undertaken in an area that contained shelves of art supplies, and a collage table that was always set up for construction and drawing. Close by was a set of easels with paper and paints. There were two full time teachers, a part time teacher and at times an adult helper or relieving teacher. The morning session comprised 45 four-year-old children, of whom 15 were girls and 30 were boys.

Thirty-three children consented to participate in the research project and 21 responded to the questionnaire. The mean drawing self-efficacy score was 109.24 ( $SD$  11.33); the highest was 129, the lowest 91. In the following discussion the children are identified by name, year level, self-efficacy score and band. For example, Callum (K 129 H), indicates that Callum is a kindergarten child who scored 129 on the drawing self-efficacy questionnaire and therefore fell in the 'high' band of scores. An analysis of the kindergarten observation and interview data revealed nine main themes.

1. Social groupings and interactions
2. Positive and negative comments
3. Children's reactions to comments and messages
4. Comments from teachers
5. Comments and messages about scribbling
6. Comments and messages about writing and drawing
7. Art activity as a reward or punishment
8. Drawing topics
9. Strategies used when drawing or making artworks.

## **5.02 Social Groupings and Interactions**

Three inter-related themes emerged in relation to social groupings and interactions. These themes were (a) gender participation in art activities, (b) same-sex groupings, and (c) groupings of children with a teacher.

### **Gender Participation in Art Activities**

Of the 33 children who consented to participate in the research, 21 responded to the questionnaire. This represented 60% of the total sample of girls ( $n = 9$ ), and 40% of the boys ( $n = 12$ ). Initial observations suggested that, in general, there were significant differences between the boys and girls, in terms of interactions and choice of activities. The teacher, Bronny, concurred with this view. From our discussion and my observations I noted the following:

*While the children had access to all spaces and equipment as a rule the boys and girls appeared to occupy quite distinct physical spaces in the kindergarten and involve themselves in differing activities. Bronny*

*commented that although all children go through muscle development and physical competencies the girls tended to show more development of fine motor skill dexterity, while boys developed gross motor skills. This was most apparent in the choice of activities. Girls chose predominantly indoor activities such as drawing, dressing up and reading books. Boys were more likely to be outside involved in running and climbing games or playing in the sandpit. Their preferred indoor activities tended to be block building which took up a lot of space and usually involved the boys in making things such as vehicles and structures.*

The girls were more likely than boys to undertake art activities, which were usually inside, sedentary activities. While there were twice as many boys as girls at the kindergarten observations showed that equal numbers of boys and girls drew and made art works. One observation took note of who was involved in art activities over a 63-minute period, and the nature of their involvement.

*Thirty percent of the boys and 66% of the girls did some art activity. On average these girls spent 11.4 minutes on art activities and the boys spent 9.5 minutes. In terms of the whole sample boys spent an average of 2.9 minutes on art and girls spent 7.6 minutes. Overall girls were more highly represented in this observation.*

This pattern was again observed over a 53-minute observation period where four boys and four girls were involved in art making. The girls averaged 17 minutes each on art activities while the boys averaged 12.5 minutes.

Another pattern that emerged was that of the solo boy working alongside the girls. For example, just one boy, Owen, who had the third highest self-efficacy level, accompanied seven girls, who were involved in a 40-minute art activity set up by a teacher. Owen worked alongside groups of girls on several occasions and was observed at a table with boys but outside of their comments and interactions. This was also the case for Callum and Samuel, who had the highest drawing self-efficacy levels.

## Same-Sex Groupings

In general the children participated in art making activities in same-sex groups. On several occasions girls would leave the art space when groups of boys started working at it, or girls would come to a table only after boys had left it. The opposite did not appear to be true – that is the boys did not tend to leave if girls arrived. The reason for the movement may be in response to the types of interactions that occurred amongst boys and girls (as will be discussed shortly). At other times, groups of children occupied a table but interacted mainly with their own subgroup consisting of boys or girls, as the following illustrates.

*Today the children are working in groups at the collage table. Five boys, Mike, Noel, Samuel, Tim and Owen are making tickets for a fish puppet show that one child will be performing later. They work cooperatively, cutting up paper and making marks on them as though it is writing. Three girls, Cathy, Hayley and Anna are working next to each other collaging and painting. Beatrice and Jacquie are at the easel, painting on the same painting, and discussing their use of colours.*

*All three groups seem in tune with their own group only. Tim says to me 'I'm trying to make a superman suit.' Owen adds, 'Yeah. We are all making a superman suit'. However they carry on with their ticket making. The girls at the table paint their own paper or boxes sharing paint and talking to each other.*

During separate interviews with Owen and Vincent I asked them who they liked to work with, and why. Both boys commented on the difference between working with boys and girls:

Owen (K 124 QH)

*Owen: Did you know those three boys Vincent, Paul and Malcolm wrecked the calendar picture? The important thing is they ripped it.*

*Rosemary: Do you draw at the table with these boys?*

*O: Yes.*

*R: So do you like working with these boys?*

*O: No, because sometimes they are mean to me.*

*R: Who do you like to draw with best?*

*O: Anna, because she says good things.*

*R: Do the boys say good things too?*

*O: No.*

Vincent (K 103 M)

*Rosemary: Who do you like doing drawing with?*

*Vincent: My friends. [He names several boys including those he has just told me are 'mean' to him]*

*R: Do you like drawing with the girls too?*

*V: Yes...with Catherine and Bronny (these are two of the teachers).*

*R: Do you like drawing with Mary and [I name several other girls who often draw]*

*V: Yip.*

*A week later Vincent says he wants to talk to me about drawing again.*

*Rosemary: What do you like drawing most?*

*V: Dinosaurs...flowers and trucks.*

*R: What do the girls draw?*

*V: The same things.*

*R: What do the children say to each other when they draw together?*

*V: Girls don't get angry—they say "I like your work." Boys say horrible things.*

*R: Who do you like drawing with?*

*V: The boys.*

The social aspect of kindergarten is very important to children (Gallaway, 1999) and the need to be with friends appeared to be a greater positive force than the negative comments they gave. However, as will be discussed later in this chapter, children can have different emotional responses to the same situation. Those with higher self-efficacy and previous positive experiences were likely to be more resilient to negative messages (Bandura, 1986), while those with low self-efficacy will be negatively affected.

### **Groupings of Children with a Teacher**

Activities that involved both children and teachers appeared to be popular with boys and girls and mixed groups. My second observation at the kindergarten

centred on two activities, both motivated and supervised by women teachers. One outside activity was a mono-printing activity using printing ink on glass and old felt pens to draw in an image. The other activity was inside and the children worked in pairs with a teacher to make dinosaur masks.

These activities appeared to be very popular with the boys and on reflection, after several weeks in the kindergarten, I was aware of some features that may have motivated the boys to participate. Firstly, the activities involved quite intensive interaction with an adult. Secondly, one activity was outside on the grass, which was an area favoured by the boys and in close proximity to other activities and friends. Thirdly the mask activity was based on dinosaurs, a theme that interested the boys.

The teachers were not always present at an art activity. If they did interact with the children it was not for the whole session and, on several occasions, I noted that girls would leave the table shortly after the teacher did. This seemed most common when there were mixed sex groupings. This suggested that, like Vincent, the girls may have regarded the teachers as one of the 'girls'. Also the nature of the interaction changed when a teacher left the group and this was likely to influence the composition of the group.

### 5.03 Positive and Negative Comments

Observations provided snapshots of the children's activities and interactions and often children's comments were both positive and negative. The following provided an insight into the types of comments children made to each other.

*On this visit I again observed two boys who often play and create together: Vincent and Mike. Vincent appears the more verbal of the two and often takes the lead in deciding on activities. On this occasion they are both working at the collage table cutting, sticking and gluing.*

*Then Mike points to Vincent's collage and says, "Ooh, I wouldn't take that home. It's poos."*

*Vincent responds, "Well yours is poos with your pants down."*

*They then enter into an extended version of this theme. All the time they continue to work on their collage, neither seemingly affected by this exchange of insults. Mike then pours an excessive amount of glue onto his collage despite, or perhaps because of, the earlier mat*



*discussion about proper use of glue. Vincent says nothing and starts to sing as he works.*

*Mike then says, "I'm making something for my mum and dad."*

*Mike then makes sound effects while he works.*

*Both seem to be talking around each other rather than to, until*

*Mike notices a picture in the magazine Vincent is flicking through.*

*Mike says, "Cut out the dog."*

*Vincent looks and then says, "Anyway I have a doggy and a cat."*

*"Me too!" retorts Mike and they then launch into a serious of competitive statements regarding the ownership of pets.*

These types of competitive comments and 'toilet talk' were common amongst these and other boys when teachers were not present. Comments between boys often involved a degree of competitiveness, provocation and defining of loyalties. At this age children are defining their roles as part of a social network and developing common understandings (Docket & Perry, 1996). Boys were observed using the art materials as toys used to provoke a reaction, such as poking another boy with a cardboard roll, stamping a dinosaur toy across a wet painting, or constructing a weapon. The art activities provided an extension of boys' play while the girls tended to focus on creating pictures and constructions that they appeared to value as artworks or gifts. Children at this age were aware of sexual roles (Elkind & Weiner, 1978), and choice of activity reflected masculine and feminine stereotypes (Elkind, 1994; MacNaughton, 2000). The way in which the boys and girls spoke to their peers also varied. This was noted as this observation concluded:

*I conclude observing a group of boys at the collage table and moved to observe two girls, Leah and Candice at the screen-printing table. In contrast to the boys, who were arguing and challenging one another these two are quietly talking to each other and helping each other with the printing. They show concern for where the paint is going and they tell me they are wearing aprons so they don't get dirty. Leah tells Candice where to put the paint and how much to use. 'You do it this way' Leah says as she put the paint on the screen. The contrast between this activity and that at the other table is startling.*

In general the girls were observed being supportive of one another. However on two occasions a girl was observed being critical of another child's action or artwork. After praise from a teacher for telling others what to do, Cathy took the opportunity to correct other girls with comments such as "You are not supposed to do that." The second event was recorded after interacting with Mike, who had the lowest recorded self-efficacy level in the kindergarten. He commented on his own abilities and received comments from others.

Mike (K 91 M)

*When I had completed my observation and discussion with the teacher Mike again approaches me and asks if he can be interviewed. I had already spoken to Mike several times so I asked him to draw a picture in my logbook.*

*I said, "Could you draw a picture of you?"*

*He replied, "I can't" and was quite insistent on this. Then he hesitantly drew a heart shape with two circles for eyes and some hair. Then a big squiggle that could represent an arm, although it is not attached to the head, and there is no body.*

*Mike said, "I did a scribble-ha, ha!"*

*Yvonne who is watching said, "It's too small." Mike ignored her and chose his sticker.*

Mike also experienced problems when drawing farewell cards for a classmate. This negative performance outcome was likely to reinforce his low drawing self-efficacy.

*Mike then joins the table and draws a go-cart on a piece of paper. He is quite attentive to his task although he draws for less than five minutes. Occasionally he looks up at his friends, who are playing with the blocks nearby. When he finishes his drawing he gives it to David, but discovers that he has used a piece of paper meant for Joe, another child who is leaving. Therefore the teacher puts his drawing in the pile meant for Joe, and not David.*

*Mike looks unhappy about the turn of events but picks up a piece of paper with David's name on it. He frowns and looking in the direction of his just finished drawing says, "But I can't copy it." The teacher suggests he could make another. Mike looks around*

*bewildered and then leaves the table to go and play with the blocks. His body language would suggest he is unhappy with the way things have turned out.*

In contrast, Callum and Samuel who displayed high self-efficacy in art and drawing, and Owen and Gillian, who had quite high self-efficacy, were all observed making positive self-comment and receiving positive verbal feedback. They all made comments about 'knowing how to' draw certain things and compared themselves favourably to others. They also received or expected positive comments from others.

Callum (K 129 H)

*Rosemary: What do you like about drawing?*

*Callum: I love it a hundred million years...I feel great!*

*R: What do your friends say about your drawings?*

*C: They don't look at them—they would say it was cool, wouldn't they!*

*My Mum and Dad say its cool—sometimes they put them on the wall, like yesterday. I've got a painting from when I was at crèche on the wall. They like all my drawings.*

Samuel (K 127 H)

*Rosemary: You said you thought you were the best at drawing and art at kindergarten. Why do you think that?*

*Samuel: My painting and drawing and cutting is better because Jake just does scribbles but I do pictures...of houses, children, palm trees, grass [Samuel looks out the window and adds things he can see to the list].*

*I used to do scribbles when I was a baby.*

*Everyone at kindy says 'cool!'*

Owen (K 124 QH)

*Owen: I just like the drawings I do—like I draw parachutes...I don't know how to draw parachutes but I do know how to draw people and things about rocket ships.*

*Rosemary: How do you know?*

*O: I just know how to do them.*

*Mum says that's a good artist—I want to be an artist when I grow up.*

*R: Who do you know who is an artist?*

*O: My sister... she's at school. My Dad makes pottery animals ...and he draws things about the house—bedrooms and stuff.*

*R: Do you think you will be good at that when you grow up?*

*O: Probably.*

Gillian (K 119 QH)

*Rosemary: You told me you are the best at drawing. How can you tell?*

*Gillian: Because I don't copy – and I do different things to them [names two girls]—and I can do a panda and they can't.*

For these children setbacks were seen as temporary situations, and easily overcome. These children expected to perform well, and received positive comments. Also as perceived self-efficacy has a generative capability (Bandura, 1986), they were likely to persist in difficult situations with positive results (Bandura, 1977; Pajares, 1996). Likewise, they enjoyed social comparison, and expressed positive emotional responses to drawing.

## **5.04 Children's Reactions to Comments and Messages**

The children did react to each other's comments and actions. Freedman (1997) suggested that society and culture increasingly influence children's art, and observations showed that a discovery of an interesting art effect would often lead other children to try the same activity. Likewise, positive comments by one child often led to others showing their ability. At times the comments were directed at their own work, such as "These colours are cool," and their friend would undertake a similar activity. In all observed cases the influence appeared strongest in same-sex pairings or groups. Children also reacted to negative messages from their peers. While for some the exchange of insults and competitive statements was fun, for others they made drawing an unpleasant experience:

*Quinn and Vincent enter into a very animated conversation with each other about how to draw two-claw dinosaurs. Callum directs his attention to them and says, "I'm drawing a stegosaurus."*

*"Me too!" chorus in Quinn and Vincent. The boys then talk about the Dinosaur movie.*

*Mack says "I've seen the two-claw on the movie."*

*"Same!" choruses the other boys.*

*One boy disputes that Quinn has actually seen the movie, "I didn't see you there...so there."*

*Vincent says "I did," and Quinn and Vincent turn to each other in obvious solidarity to the others.*

*The boys continue to challenge each other as they draw. Quinn says "Poos" as he struggles with a drawing and this is greeted with laughter. The boys continue to draw and interact and entertain each other with quite crude 'toilet talk', inviting each other to better the remarks. A disagreement develops at one stage and one boy threatens another with "I'll tell my big brother on you."*

*"Anyway, he doesn't know where I live."*

*"So...I hate you guys."*

*All the boys, except Callum, interact in an aggressive manner but seem animated and mostly comfortable with the interactions. Quinn however looks unhappy when Vincent tells him it looks like he has drawn a 'willie' on his dinosaur and the boys laugh at Quinn. He tries to rub out the offending mark with a rag and then throws the drawing in the bin.*

At times children were discouraged from doing art activities by their peers. Vincent's decision to undertake art activities created a tension between him and his friends. The following excerpt illustrates this.

*When the teacher moves away from the table Vincent joins Callum and starts to draw. Quinn comes to the table and tells Vincent about Mike's behaviour with the blocks. Quinn seem to expect Vincent to return to the group and settle the dispute. However Vincent stays at the table and draws and Quinn returns to the blocks.*

*After a time Quinn again returns to the table where Vincent is drawing. He has several toys with him and puts them on the table. I realise how difficult it must be for Vincent to persevere at his drawing considering the pressure on him from his friends to do other things—to play, to arbitrate, to react.*

*Later I comment to Therese, one of the teachers, about my*

*observations and impression that Vincent is under pressure to do other things. She tells me that when Vincent first arrived at the kindergarten the other three boys were attracted to him as a natural leader. However this grouping tended to be boisterous and they often got into trouble. So the teachers decided to put each of them in different areas at the beginning of the session. Left undisturbed they noticed that Vincent would create at the art table, often for the whole session and into the pack-up time. When Quinn, who previously had not done any art activities, was permitted to join Vincent he too drew and collaged.*

Children with higher drawing self-efficacy appeared more likely to expect and receive positive comments. However individual children reacted to negative comments in various ways. Gillian, who had quite high drawing self-efficacy interpreted children saying bad things about her drawings as using 'naughty words' rather than commenting on her artwork. Vincent and Mike who often played together were asked how they felt about comments other children made about their art. The following provides a view of a similar incident from two perspectives.

Vincent (K 103 M)

*Rosemary: [I discussed with Vincent the observation in which Mike said his drawing was 'poos'.] How did you feel when Mike said that?*

*Vincent: I said his one was poos too*

*R: Did Mike mean it when he said that?*

*V: No he was just saying that. I took my drawing home.*

Mike (K 91 M)

*Rosemary: Last week when we talked you said that your friends sometimes say bad things about your drawings. What sort of things do they say?*

*Mike: Naughty words.*

*R: Why?*

*M: Don't know.*

*R: What do you do?*

*M: They say "Yuck" – I cry—and I tell the teacher.*

*R: What do you do with your drawing when the children say "Yuck."*

*M: I throw it away.*

*R: Is it true when they say 'Yuck'?*

*M: No. But Vincent said, "Cool."*

While both boys felt the other really 'didn't mean it' their reactions were different. Mike cried, told the teacher and threw out his drawing. Vincent on the other hand took his drawing home. Girls appeared less likely to make critical comments to each other and I did not observe boys being 'mean' to girls. I discussed this with one of the teachers who concurred that this was the norm rather than the exception. She suggested that girls are more likely to become upset and involve an adult and boys would avoid situations that lead to tears.

### **5.05 Comments from Teachers**

All comments and reactions from the teachers were positive. Children had access to art materials and equipment and in general the teachers did not interact with the children at an art activity, unless an activity required monitoring or the children needed guidance. This was in keeping with the set-up-and-step-back approach associated with a child-centred approach, as observed by Lewis (1998/99). When the teachers were at the collage table they usually offered technical guidance rather than discussion about the artwork.

On one observed occasion a part time teacher, Lynda, had set up a table with dye and black paint. Unlike previously observed activities, this activity had a greater element of adult involvement and the session began with Lynda modelling the procedure and explaining the process. On this occasion there were a number of messages regarding the right way of doing the activity. Modelling of art procedures was not a common place practice at the kindergarten and Lynda took the opportunity to tell me that she strongly believed in modelling the activity and directing the children, without stifling them. However, while Lynda managed the activity effectively she did not comment on the content of the art work, and her defence of her modelling approach showed a tension between the child-centred approach and a more cognitive approach (Gunn, 2000). Seven girls and one boy were involved in this activity over the 40-minute period. About four children could fit at the table at any one time and the teacher reintroduced the activity to each new participant or praised children who instructed new comers. Lynda encouraged the children to follow a sequence of events and made comments such as "I love that Yvonne—you are just



about ready to use the cotton bud.” The comments focused more on appropriate behaviour and general praise than on the elements of the artwork.

Although the teachers did not make many comments about the children’s drawings, the children interpreted the teachers’ messages and reactions as positive. For example:

Callum (K 129 H)

*Rosemary: Who is good at drawing at this kindergarten?*

*Callum: Everyone is good. No one has trouble with their drawings because the teacher loves all their drawings.*

One might suggest that had the teacher made negative comments about someone’s drawings, Callum would have regarded that child as being no good at drawing. One teacher also told me how she was careful to give praise for both representational and non-representational drawings as many children at this age drew both.

General comments or acknowledgment by a teacher also influenced what other children chose to do. Teachers appeared to be more influential on the girls than the boys. For example the teacher on another occasion commented on how well two girls were stapling. Within minutes, two other girls stopped drawing and also stapled. Teachers also linked writing competencies with readiness for school.

*Hayley, who is at the collage table, writes her name on her paper and the teacher comments, “You are just about ready to start school because you can write your name so nicely.” This compliment is met with several reactions. Hayley looks very pleased and Danielle promptly holds up her drawing to show the teacher. Beatrice writes her name and asks the teacher if she thinks she can be a schoolgirl now she can write her name.*

While the teachers were equally positive towards boys and girls, with the exception of comments to Callum, all other recorded art comments were directed towards girls. This reflected the composition of the groups in that the girls, and only a few boys, were likely to interact with the teacher during art activities.

## **5.06 Comments and Messages about Scribbling**

Although the teachers consciously praised both representational and non-representational drawings the children did not. Some children regarded non-

representational drawings as *scribbles*, and were critical of them.

Mike (K 91 M) commented on his own drawing:

*"I did a scribble- ha, ha!"*

Samuel (K 127 H) commented on why he was better than Jake at drawing:

*"My painting and drawing and cutting is better because Jake just does scribbles but I do pictures...of houses, children, palm trees, grass...I used to do scribbles when I was a baby."*

Owen (K 124 QH) commented about the drawings he drew at home:

*Owen: I keep my pictures but I don't like the ones that are like scribbles and stuff—throw them in the rubbish.*

*Rosemary: Do you do lots of scribble ones?*

*O: No—I do good ones now.*

A group of girls were sitting near a teacher when the following incident occurred:

*Danielle makes quick random marks on her picture. This attracts the attention of Beatrice who says quite loudly "Don't scribble!" Danielle replies that it is meant to be like that. Although her reply is defiant she stops the mark making and goes on to another part of the drawing. The teacher did not comment on the exchange.*

These comments suggested that children saw scribbling both as immature and wrong. However some four-year-olds were developmentally at the scribble stage, and although teachers encouraged both forms of drawing, older children were more likely to be aware of how recognisable their drawing were, and care about gaining recognition (Freeman, 1997). Therefore children who were aware of how their drawings represent known objects, were more likely to be self critical, and give others negative messages about scribbling.

## **5.07 Comments and Messages about Writing and Drawing**

Just as 'scribbling' attracted negative comments the drawing of numbers and letters attracted positive attention. While adults may regard writing and drawing as distinct skills, to these children there was little distinction. The interview with Jane illustrated the way in which drawing and reading and writing skills were perceived as inter-related:

Jane (K 93 M)

*I discuss the responses Jane gave to the questionnaire in which she said she didn't like doing art much but she really liked the pictures she made and she thought she was quite good at drawing. To this she commented:*

*Jane: I do really like my pictures now but I don't like drawing much because it's a bit hard for me to do.*

*Rosemary: What is really hard?*

*J: Reading books.*

*R: And what things are hard to draw?*

*J: Writing.*

*R: You said last time that you had trouble drawing people.*

*J: I can draw them now—I was just joking.*

*R: What do you like drawing?*

*J: I like drawing writing—and I copy Mum's writing...and I draw numbers...and flowers and butterflies.*

Just as Jane saw the lines representing flowers or butterflies as forms of drawings, so too did she see the number '4' or the letter 'J' as a form of drawing. She related the difficulty she had in drawing to the difficulty she had reading books, and found writing hard to draw. Jane perceived reading and writing as strongly linked to drawing and Vincent, Samuel and Owen all commented on their ability to write letters or numbers when they talked about drawing.

Vincent (K 103 M)

*Vincent: Look I did a number 7 [Vincent is drawing while he is talking to me. This is the only time he asks me to notice what he has drawn].*

Samuel (K 127 H)

*Rosemary: What do you really like about art, drawing and doing things like that?*

*Samuel: Painting...painting scorpions...know how to write it [Samuel proceeds to write his name].*

Owen (K 124 QH)

*Rosemary: You said you have some troubles when you draw at kindergarten. What trouble do you have?*

*Owen: Some trouble with the rocket [models rocket fins with his hands] but it's supposed to go the other way. I turn it over and I do it right.*

*R: How do you get it better?*

*O: I just learn about it. And I draw lots of letters like Ns and things.*

Although I did not observe children asking other children to draw things for them, I did see children asking others to write numbers or letters for them. Therefore the children had taken on board messages about there being right and wrong ways to write. Keeping in mind that children's comments suggested that they do not strongly differentiate between drawing and writing, then children received messages about the right way to *draw* letters and numbers. As noted, teachers and the children also made links between children's ability to write and readiness for school. Mike (K 91 M) believed he would find it easy to draw when he turned five and went to school.

### **5.08 Art Activity as a Reward or Punishment**

A person's emotional response to an activity impacts on their perceptions of an activity as successful or satisfying, and provides a source of self-efficacy information (Bandura, 1986). Therefore it was noteworthy that on four occasions boys were directed to the art activities as a form of control. While these tactics proved successful, in that the undesirable behaviour ceased, the underlying message is one of art activities as a form of punishment or control. The first instance, which involved separating Vincent from his friends, has been discussed. The second instance was observed during my first casual observation at the kindergarten and again involved boys:

*Several boys working at the art table were involved in a physical altercation – pushing, hitting and kicking and an adult intervened to quell the situation. The boys resumed working with the materials, which they used to provoke and interact with each other rather than to make art works. Later discussion with the teacher revealed that one of the boys was on inside art activities because he had bitten someone outside. Therefore one could conclude that the art activity was used to control unwanted behaviour and may be interpreted by the participants as a form of punishment.*

The third example occurred when three boys were directed at the table set up for a dye and black paint activity to settle aggressive behaviour. They settled and worked for five minutes on the activity. In another incident Quinn was asked to draw a picture of his dinosaur toy rather than annoy another child with it.

Artworks were also associated with positive messages such as rewards or gifts. On two occasions girls gave me their artwork to keep as gifts, and children spoke of giving their paintings to their parents or siblings. When a child left kindergarten the children drew pictures to go in a farewell card. In these cases of reward and punishment the artwork was the reward while the art activity was the punishment. For many however the act of making artworks appeared to be a pleasurable one.

### 5.09 Drawing Topics

Some children had favourite topics to draw. Callum (K 129 H), for example often drew dinosaurs and had a reputation amongst the children and teachers for drawing well. He appeared to follow a set sequence of lines and shapes to create contour drawings of dinosaurs. Some of the boys, including Owen (K 124 QH) and Vincent (K 103 M), said that dinosaurs were their favourite things to draw. While the dinosaur topic was popular amongst the boys, a dominant drawing theme for the girls did not emerge.

### 5.10 Strategies Used When Drawing and Making Artworks

Some children made comments that provided insights into strategies they used. Owen, who had the second highest self-efficacy score, used a problem solving approach when he had difficulty with colouring;

Owen (K 124 QH)

*Owen: I have a colouring book at home. Sometimes I stay inside the edges and sometimes I don't—but that doesn't matter because I just cut them out [cuts around the picture when he goes over the lines].*

He also makes a link between cognitive processes and drawing:

*Rosemary: How do you get [the drawing] better?*

*Owen: I just learn about it. And I draw lots of letters like Ns and things.*

As noted Samuel, Owen and Gillian (see pages 70-71) all had a belief in 'knowing how to' draw. These three children and Callum had the four top self-efficacy scores. Gillian also made a link between good drawing and original drawings, and viewed copying as something done by less able children. Vincent (K 103 M) and Mike (K 91 M) also made comments that provided insights to how they solved or viewed drawing problems. While Vincent often drew he had moderate drawing self-efficacy and the following comment would suggest that Vincent attributes some aspects of success or failure to external factors.

Vincent (K 103 M)

*Rosemary: You said last time that you sometimes have trouble with your drawings. What troubles do you have?*

*Vincent: Umm...I mess them up.*

*R: How do you know when it is messed up?*

*V: Because I do it wrong...someone else messes it up.*

Mike also commented on outside factors. In his case he said he liked drawing things that the teacher helped him with. Knowing that the teachers did not actually draw for the children, or take lessons on drawing, I asked him how they helped. He said he didn't know

## **5.11 Summary of Themes**

The kindergarten interviews and observations generated several themes and impressions in relation to drawing self-efficacy. The data highlighted the importance of the social interactions in children's art experiences and development of drawing self-efficacy. Observations indicated that girls were more highly represented at art activities than boys, and tended to exchange more positive messages than boys. Children preferred same-sex groupings and were more likely to work in mixed sex groups with a teacher.

The comments and messages amongst children, and children's reactions to these were observed and recorded. These contributed to an understanding of the impact children have on each other, and sources of self-efficacy information. Teachers' interactions with children were consistently positive although art comments tended to focus on appropriate behaviour rather than aspects of art, and at times art activities were used to settle undesirable behaviour.

Interviews and observations suggested that children did not strongly differentiate between drawing and writing at this age and children and teachers linked writing skills, and by implication drawing, to school readiness. Children also expressed the view that scribbling was bad drawing, and therefore younger children were more susceptible to criticism. Observations also revealed that the children with higher drawing self-efficacy could draw representational drawings, worked on art activities for extensive periods of time compared to others, and could write numbers and letters. They received and expected positive comments from others and showed an awareness of strategies for learning and solving problems. They all experienced positive emotional responses to art and some had developed drawing strategies for specific topics.



## **CHAPTER SIX**

### **INTERVIEWS AND OBSERVATIONS**

### **SCHOOL RESULTS**

#### **6.01 School Results**

This chapter reports on the findings from the observations and interviews with new entrant to year four children at Eastbank School. Where pertinent to the discussion, a name, year level, self-efficacy score and band will identify the child. For example, Mandy (NE 138 H), indicates that Mandy is a new entrant child who scored 138 on the drawing self-efficacy questionnaire and therefore fell in the 'high' band of scores. In discussions that clearly identify the year level, identification of year level may be omitted. Analysis of the school based observation and interview data revealed eight main themes. These themes, supported by excerpts from the interview and observation records, will be presented and discussed.

1. Social groupings and interactions
2. Comments and messages about scribbling
3. Comments linking reading, writing and drawing
4. Messages about right and wrong ways of drawing
5. Comments and messages about being good at drawing
6. Strategies used when drawing
7. Ownership of ideas and topics
8. Teacher comments and messages.

#### **6.02 Social Groupings and Interactions**

Observations were based on observing a child while engaged in drawing activity and at times the social groupings or interactions stood out as an important feature. Three inter-related themes emerged in relation to social groupings and interactions. These were, (a) the differences between the kindergarten and the school setting, (b) same-sex groupings, and (c) dominance in the social setting.

##### **The Differences between the Kindergarten and School Setting**

There were differences between the physical and social environment of the school

and kindergarten, especially in terms of the physical environment and level of activity. For example while kindergarten children, especially the boys, often occupied outside spaces and engaged in physically energetic activities, these were not an option during much of the school day. Furthermore the range of free choice of activities offered at the new entrant level, such as painting, dough modelling and reading, were activities more often favoured by girls in the kindergarten. In the school environment the types of activities that many girls were choosing to do at kindergarten were part of the basic school curriculum. Based on this, the incentive to complete work, so one could choose another activity, appeared to favour the girls. Also in contrast to the kindergarten the school social setting was more structured and promoted certain types of behaviour and activities regarded as educationally worthwhile or appropriate.

At the school all boys and girls undertook art activities. If the level of participation by boys in art activities at the kindergarten was typical of groups of four year olds then for some new entrant boys this was their first drawing experiences in an educational setting. According to self-efficacy theory (Bandura, 1986) past experiences are highly influential in developing self-efficacy.

### **Same-Sex Groupings**

In three classes the trend towards same-sex groupings was noted; the new entrant, year three and year four class. The new entrant room had 16 pupils, seven boys and nine girls, who sat at tables in mixed-sex groups of four to six children. However for many activities the children sat on the mat area and children usually chose same-sex groupings and pairings. It was also noted that children with similar drawing self-efficacy levels often paired up. In the ranking of self-efficacy scores all new entrant children above the class mean of 110.54 were girls ( $n = 6$ ). All the boys and three girls were on or below the mean. One boy scored a very low score being the third lowest score over the sample group, while one girl had the highest score. Socially same-sex groupings tended to reflect drawing self-efficacy levels, and boys scored almost one standard deviation below the girls for drawing self-efficacy mean.

Year three children also generally chose to interact in same-sex groupings. On the mat area the boys all sat at the back while the girls sat near the teacher. At their desks children tended to interact in same-sex groupings. Robert (Y3 92 M), who had the

lowest drawing self-efficacy score in this class, named four male friends who he thought also had trouble drawing well. One of these boys had scored below the class mean, another was a year two boy in this year three class, and two of these boys did not participate in the research. As preference is one indicator of self-efficacy (Bandura 1986), those who preferred not to participate in the project might have had lower drawing self-efficacy than children who participated. As peer interactions were an important source of feedback, and people care about social comparisons (Bandura, 1986), Robert's friends may have reinforced his comparatively low drawing self-efficacy.

Same-sex grouping was also a feature of the year four class where the children were permitted to select a friend to sit with. As a result of social self-selection the children were grouped with friends and this generally resulted in same-sex clusters. The drawing self-efficacy mean for year four was 106, which was lower than the sample mean of 109. Only two of the 15 boys scored above the sample mean, and four boys were above the class mean. Furthermore, statistical data showed a significant Gender by Year Level interaction effect, with the boys on average being at a level over 1.5 standard deviation units lower than the girls. Therefore same-sex groupings tended to create a social network that reflected drawing self-efficacy levels. Rachel (Y4 130 H) had the highest drawing self-efficacy score in year four and all the children at Rachel's table had a drawing self-efficacy score above the class mean of 106. Andrew (Y4 70 L) had the lowest in the class and sample and his group consisted of five boys and one girl, all of whom scored below the class mean. The social interactions and verbal messages also varied between boys and girls. In general the girls were supportive but critical of attempts to copy, were quieter than the other group and attracted little external attention. The social climate in Andrew's group was far more volatile with openly negative comments about their drawings. There was teasing and exchange of negative messages about their drawings, and one child's difficulties or frustration often led to another showing the same reaction. Therefore the qualitative data tended to support and provide insights into the quantitative findings.

### **Dominance in the Social Setting**

Observations at all year levels suggested a link between children's drawing self-

efficacy and dominance in the social setting. Confidence in drawing appeared to mirror social confidence and suggested links with self-concepts and self-esteem. In the new entrant room for example Mandy (NE 138 H) usually sat next to the teacher while Fran (NE 104 M) and Jenny (NE 97 M), who both had lower drawing self-efficacy, often sat on the outskirts of the group. Interaction with other children and levels of assertiveness varied between Mandy and these two girls. Mandy often assumed a leadership role amongst her peers and on several occasions she told other children what to do, distributed materials, initiated discussions with the teacher and corrected other children's behaviour. Demarcation of space was one issue that illustrated the different expectations and reactions of those with higher and lower drawing self-efficacy. In one observation Fran (NE 104 M) and Jenny (NE 97 M) were forced to move during a drawing session when the circle they were in was made bigger, while in a similar situation the next day Mandy (NE 138 H) asserted her right to occupy a space.

Children with high drawing self-efficacy appeared less likely to attract or give negative messages about drawing. Children with the lower self-efficacy, on the other hand, were subject to negative comments and messages from other children and were more reluctant to show their drawings to others. As the physiological state of a person impacts on their self-efficacy (Bandura 1986), fear of criticism or failure would limit their drawing activity.

Olivia (Y1 132 H) scored the highest drawing self-efficacy score in year one and also enjoyed a dominant role amongst her peers. On four occasions during one session Olivia took the opportunity to correct or direct her fellow pupils and they accepted her comments with little resistance. The observations in the year one class also highlighted a difference in social dominance in relation to drawing self-efficacy levels. While Olivia (Y1 132 H) was either intent on her drawing or was a prominent member of her social group this was not true for Kenny (Y1 96 M), who had the lowest drawing self-efficacy. The most striking feature of the first observation that involved Kenny was the way in which his peers ignored him, and when Kenny was the focus of attention it was for the 'wrong' reasons.

During one observation that focused on Kenny the session began with two incidents. In the first the teacher commented on how disappointed she was to see two children reprimanded for throwing stones. In the second one an older child returned a

toy that was left in the playground. Both incidents involved Kenny. However this type of unwelcome attention was perhaps not as negative as being ignored. The following excerpt highlighted the subtle social interactions that occurred amongst children. After the teacher had introduced the lesson, asked questions and modelled ways of working the children returned to their tables.

Kenny (Y1 96 M)

*Kenny is at one end of the table, with two girls to his right, two boys to his left and a boy at the other end. Kenny begins his drawing straight away. He works quietly and with full attention to his drawings although the three boys at his table have hardly started and have traded several boisterous comments about who has the most and the best video games. The girls are a lot quieter but occasionally speak to each other. Kenny appears totally absorbed in his drawing. He hunches over his drawing, his mouth moves slightly as he draws. He seems oblivious to others around.*

*One of the boys calls out to the teacher that "Natalie has done a humungus fringe on her drawing." Mrs. Taylor makes a positive comment about Natalie's lovely fringe. Kenny appears aware of this comment as he touches his own fringe and carries on drawing. Bryan discusses Natalie's fringe and Kenny looks up and says with a worried expression "I haven't got a fringe." He looks to the other children for a comment. None come. "Where?" he asks and flattens down his hair.*

*At this stage Kenny appears to have completed his drawing. It is also at this point that I first become fully aware of the way in which his peers ignore Kenny. Kenny stands up at his seat and leans forward and tries to attract the attention of the boy one along from him.*

*Six times Kenny calls Bryan's name, "Bryan! Bryan! Bryan! Bryan! Bryan! Bryan!"*

*Bryan (109 QH) continues drawing as though he cannot hear him. He then looks up at Kenny but turns to the boy on the other side and talks about his fringe. Bryan then goes up to the teacher with his drawing saying he is worried about the shape of the head. Mrs. Taylor assures Bryan the head is just fine.*

*Kenny is aware of this interaction and when Bryan returns to the desk Kenny calls to the group "Look at this big long legs." He holds up his drawing and turns it towards the other children. He repeats his message several times but all the children ignore him, which must have been hard considering his insistence.*

*Kenny then returns his drawing to the table and draws again. Then he points at his drawing and says to Nic (102 M), who is next to him, "Look Thomas has ten eyes." Nic then turns away and talks to Graham (112 QH) without acknowledging Kenny. Nic is flicking a pencil and Kenny imitates this. Kenny then comments on the small size of Nic's drawing. Nic ignores this but does look at this pencil flicking. The slight has seemed to be responded to with a 'kindness', that is an acknowledgement. It is as though Kenny gains a small amount of power with his negative comment about size.*

*Kenny returns to his drawing and makes explosion type noises as he makes flick marks along the leg of one person in his drawing. Now Kenny has Kate's attention and she asks with a frown what he is doing. He replies that he is drawing these things and suggests he has hairs on his arms. Kate returns her attention to her own drawing.*

*Kenny then says to no one in particular "I have size eyes on my picture...I did me big-as...Kenny Smith...big as!" He holds up his picture and points to his name. All the children ignore him completely.*

While Kenny did not receive comments he did receive messages regarding his social standing, and while the children were not overtly cruel their behaviour was not kind. A similar pattern emerged early in the second drawing session when his group positioned the toys so he could not see them to draw. This time Kenny looked on the verge of tears and his teacher invited him to join another table. His manner changed at the second table and he became more vocal and appeared to be happier. Interview comments suggested that children did not show their drawings to Kenny because he did not comment, however he was animated and talkative in the interview and actively sought the response of his peers. His reactions to the change of social group suggested that Kenny's self-efficacy in drawing was in part linked his social standing in the classroom, and therefore to his overall self-concepts.



Judy (Y3 118 QH) who scored the second highest drawing self-efficacy score in the year three class also enjoyed a position of authority amongst her peer group. She told other children their drawings were good and took a soft toy from another boy when she wanted to draw it. She was pleasant towards others but appeared to expect little resistance from them. She was seated at her table between two other girls with high drawing self-efficacy. Kerryann (Y3 94 M) who had the second to lowest drawing self-efficacy score also sat with children of similar drawing self-efficacy levels. Those children who said they expected to get negative comments about their drawings from others, not only did so but they were also more likely to make negative comments. Year three children also tended to associate with children of the same-sex and of similar drawing self-efficacy.

The year four group showed a slightly different perspective on the theme of social dominance. As discussed earlier the self-selection of groups resulted in same-sex grouping and also grouping of children into higher and lower bands of drawing self-efficacy. The group that contained Rachel (Y4 130 H) was all girls and Rachel did not appear to be dominant in that group. However she appeared to enjoy drawing, displayed behaviour that showed an intense attention to the act of drawing and was seldom disturbed by the actions of others. The group did have a dominant person who appeared to be the main decision-maker and was both supportive and critical of others. On the other hand Andrew's (Y4 70 L) group did not have a dominant person and Andrew was easily distracted from drawing. He did not appear to enjoy the activity and children made negative comments about their own and others' drawings. A strong impression gained from researching with this group of year four children was the vast difference between the experiences and patterns of verbal interaction of the children with high drawing self-efficacy and those with low, which also tended to reflect gender. Quantitative findings supported this observation, as there was significant difference between year two and year four in terms of emotional responses. Also at year four the boys were 1.25 standard deviation units lower than their female classmates for positive emotional responses to drawing.

Overall the children with low drawing self-efficacy had less social dominance, power and recognition in the observed drawing sessions than those with high drawing self-efficacy. Those with high drawing self-efficacy seemed more likely to enjoy a positive relationship with their peers and a dominant role in social settings,



often instructing others. As noted in the literature review, Biemiller *et al.* (1998) also found evidence that children with high confidence and achievement tended to instruct others and monitor their own progress.

When children appeared happy with their drawings, and had high self-efficacy they tended to work in a solitary manner or be in a dominant role. However children with lower self-efficacy tended to lack authority in the social setting and be influenced by the negative experiences of others. This appeared, from observations, to be most influential in same-sex groupings and for older children. Quantitative data also showed a significant Gender by Year Level interactive effect, and a significant difference for Year Level, with younger children reacting more positively to vicarious experience than older children. Self-efficacy theory (Bandura 1986) suggests that vicarious experience is most influential when models and recipients share similar personal characteristics such as age and gender, and that negative messages have a greater impact on lowering self-efficacy than positive messages have on raising it. Therefore negative comments amongst peers should be an area of concern for teachers wishing to promote positive learning environments.

### 6.03 Comments and Messages about Scribbling

Just as the low-efficacy kindergarten children commented on 'scribbling' so too did the school children. Some children with the lowest class drawing self-efficacy commented on their own drawings sometimes being scribbles, or others saying they were scribbles.

Fran (NE 104 M)

*Rosemary: Do your friends sometimes say bad things about your drawings?*

*Fran: Boys do. Sometimes they say it's scribble...but I don't...I don't do scribble.*

Jenny (NE 97 M)

*Jenny: I cannot draw people – used to do scribble ones. Now I get dad to do it for me.*

In asking her father to draw for her Jenny may have reinforced her self-doubts and removed the chance to improve through experience. Scribbling, while a natural and important stage in drawing development, was regarded as undesirable. Comments

about scribbling were regarded as insults, as Fran's reaction to the boys' comments and the following interview with Tammy illustrates:

Tammy (NE 116 QH)

*Rosemary: Do your friends sometimes say bad things about your drawings?*

*Tammy: Well sometimes Phillip does. He says, "You're doing scribbles." And I say "No I'm not!"*

*R: Mmm.*

*T: I never do scribbles – never!*

In the year one class comments linked scribbling to levels of maturity and to poor class work. Christopher (Y1 123 QH) commented that the teacher didn't give stamps for scribble, and Mary (Y1 103 M) said that "When she was a baby I might have done scribbles" and now she would throw her drawing away "If it's too scribbly." While comments about scribbling were negative ones, drawings that were representational attracted positive comment. Thomas (Y1 124 QH) said that one girl was now good at drawing based on a recent drawing, "She did some grass with some flowers and she did some clouds at the top." Therefore some children at this age, like the wider culture, valued ability to represent realism.

Reference to scribbling became less common after year one. Only two comments referred to scribbling. One was from Paul (Y2, 94 M) who said, "I do mistakes – when Lara (little sister) pushes me – I make scribbles." The other comment was from Patrick who explained why some children were not good at art.

Patrick (Y3, 118 QH)

*Rosemary: Who do you think is not so good at art?*

*Patrick: John, Sally and Phil.*

*R: How do you know they are not good at art?*

*P: Sometimes they just do scribbles – when you're supposed to do a big head they do a little one.*

The three children Patrick nominated chose not to participate in the questionnaire. This adds weight to the assertion that preference is linked to efficacy levels (Bandura, 1986, 1997), and non-participants in this research may have chosen not to participate because of their low drawing self-efficacy.

Comments about scribbling suggested that scribbling was seen as immature and

wrong. Furthermore, it was an insult to have your drawings called scribbles and children even criticised their own scribbly drawings. Therefore, while literature on children's graphic development (eg. Cox, 1991) supported the view that children were most likely to become critical of their drawings around the age of eight, these observations suggested that children were critical of their own and other's drawing ability from the age of four onwards. Comments about scribbling were most common amongst the age groups that were likely to have some children operating in the developmental stage of scribbling. Therefore younger children, and those in the early developmental stages of graphic development, were more likely to receive negative comments about scribbling and these messages could be a source of drawing self-efficacy information. Moreover, as Freeman's 1997 research on cross-category drawing showed, five-year-olds are cautious with innovative drawings for fear of failing to gain recognition. In other words, five-year-olds do care whether their drawings are scribble (non-representational), or recognisable (representational).

#### **6.04 Comments Linking Writing, Reading and Drawing**

Comments that linked literacy activities, such as writing, reading and handwriting, to drawing generally fell into two categories: (a) negative comments about literacy skills; and (b) comments linking drawing skills to literacy skills.

##### **Negative Comments about Literacy Skills**

Comments and messages about writing, reading and drawing began with the kindergarten children. One of the first school based examples that linked drawing activity with literacy skills was in the form of insults. Bird (1994) observed similar exchanges when researching discourses of ability and effort with seven to eleven-year-olds. The following excerpt follows on from an incident in which Mandy reasserts her rights to occupy a space:

Mandy (NE 138 H)

*The demarcation of space appears to cause some friction and Mandy and Michael (NE 109 QH) interact with slightly raised but indecipherable voices, face pulling and poking of tongues. At this point Mandy raises her voice to a level that can be heard by others and asserts her superiority by announcing, "Anyway, you don't know*

*how to spell cat!"*

*Although this is directed at Michael, Karl (NE 109 QH) who is one further along calls out "C. T!"*

*Mandy says in a derisive tone "C. A. T!"*

*Michael says, "I knew that!"*

*Mandy replies "You should have said that then!"*

Another example linking drawing experiences to literacy skills was observed in the year two class when Vance (Y2 111 QH) received negative comments about his literacy skills as he worked on his drawing. While Vance had quite high drawing self-efficacy he was experiencing difficulty that day and often sort reassurance from others. Nancy (Y2 117 QH) on the other hand showed enjoyment while drawing, and had received positive comments from the teacher and other students.

Vance (Y2 111 QH) and Nancy (Y2 117 QH)

*Vance starts his drawing again, now on the fourth side of his two pieces of paper. He checks with Mrs. Baxter where to start the drawing and she shows him. The teacher is close by as Rosalee continues drawing and Vance rubs out again.*

*Nancy says to Rosalee (apparently referring to Vance) "He doesn't understand English."*

*Mrs. Baxter hears this and says, "Who?"*

*"Him" says Nancy.*

*"Oh Nancy" says Mrs. Baxter. The teacher's reaction is both critical of Nancy, and reinforces that this was a deliberate slight against Vance.*

### **Comments Linking Drawing Skills with Literacy Skills**

Kindergarten findings suggested that drawing and writing ability were regarded as one area of accomplishment and this theme continued amongst some of the younger school children.

Fran (NE 104 M)

*I can draw people, and Os and Ds and my ABCs and my numbers.*

Jenny (NE 97 M)

*Rosemary: You said you sometimes have trouble in class – what*

*troubles do you have?*

*Jenny: I have trouble with drawing numbers...I'm good at pictures, not good at numbers. Sometimes I make mistakes with flowers...I rub it out when it's stupid.*

Jenny also linked success in handwriting to successful art activity. When asked what things she was best at in art Jenny replies "Paint. 'Eggs', today we did the letter 'e'." Jenny commented on what her father could draw well, "Dad draws sharks, dolphins, frogs, leaves, and writing. He draws them and I go over them."

As the year levels increased children still linked literacy skills and drawing but the areas were more discrete. For example Olivia (Y1 132 H) connected improved drawings to improved reading when she commented on a girl who scribbled but was able at other times to draw and read. Both Mary and Keith responded to drawing questions with comments about writing.

Mary (Y1 103 M)

*Rosemary: How have your drawings changed as you have got older?*

*Mary: When I was a baby I might have done scribbles like my brother and as I get older I do gooder and gooder writing.*

Keith (Y1 104 M)

*Rosemary: What does the teacher say about your drawings?*

*Keith: Sometimes she takes it to assembly if it's really good – got it for writing and handwriting and drawing.*

Michelle (Y2 95 M)

*Rosemary: What do you like most – drawing, cutting, painting?*

*Michelle: Write.*

Paul (Y2 94 M), who had the lowest self-efficacy in year two, linked success in drawing to positive comments about his handwriting. Following an observation I asked Paul what the teacher had said about his drawing. Paul said 'She said it was good.' In fact Mrs. Baxter was quite specific in praising the detail. I asked him what was good about it and he said, "I did good handwriting today." It is interesting that another positive experience, which appeared unrelated, was referred to explain why his drawing was good.

Kerryann also linked handwriting with drawing when she explained why she was nervous about showing the teacher.

Kerryann (Y3 94 M)

*Kerryann tells me she likes her drawing but then whispers that she doesn't want to show Mrs. Hood because "She will growl." (This seems unlikely based on my observations and knowledge of Mrs. Hood.) Kerryann says they'll get growled at if they are messy. She then tells me that she sometimes does messy handwriting.*

Younger children, who were confident in drawing, often expressed confidence in their ability to read and write. Three new entrant and two year one children, made a special point of demonstrating their ability to read and write during interviews. Judy, who had the third highest drawing self-efficacy score in her year three class commented about recent positive comments that made her think she was now even better at drawing.

Judy (Y3 118 QH)

*Judy: Since you asked me those questions [about drawing] lots of people said I was really good.*

*Rosemary: What drawings were they talking about?*

*Judy: My handwriting and my art.*

During an observation, when Judy told me about her drawings, she told me she could spell 'registration' and had been able to since she was six. Danyon and Rachel explained why they believed some children could not draw well.

Danyon (Y2 124 QH)

*Rosemary: Who isn't very good at drawing?*

*Danyon: Paul – because he needs to learn words like 'come'.*

Rachel (Y4 130 H)

*Rachel: When they can't really read they can't really draw because – like if you need a word to draw a picture, you know how to draw it – 'cos if you want to draw a dog, you draw it because you know the word.*

Kirsty (Y4 119 QH) also expressed the opinion that children who read well also draw well, and vice versa. Kirsty said that she was good at both and thought handwriting was a bit like drawing because you could do handwriting 'neat' just like your drawing. Making the link between handwriting and drawing may have led Kirsty to value *neatness* in her drawing. Therefore messages that were received in the

area of handwriting were applied in making judgements about the quality of drawings. The idea that young children see drawing and writing as similar is not surprising when one considers that both are sign systems, and both are forms of visual representation using marks. However from an adult point of view we give separate, and perhaps quite conflicting, messages about drawing and writing.

### 6.05 Messages about Right and Wrong Ways of Drawing

While the teachers did not comment about right and wrong ways of drawing, the children developed ideas and discourses about the right and wrong way to draw. There were comments that focused on the size of drawings, the content, staying within the lines, colouring-in properly, use of space, drawing appropriate topics, drawing things the *proper* way, and making *mistakes*. Children could be critical of each other's drawings and children subjected to criticism from peers appeared uncomfortable and unhappy, as the following excerpt illustrates.

Phillip (NE 107 M) and Evan (NE 81 QL)

*Colin, who is new to the class, is drawing a large picture. He turns to Phillip who is drawing a smaller but well proportioned drawing and says loudly that Phillip's drawing is too small and that they need to fill the whole page. Having been told of his 'error' Phillip hunches lower over his picture and tries to rub out the drawing with the back of this hand. His body language suggests he is now uncomfortable with the activity and with others seeing his drawing.*

*Evan, who is drawing quite a large drawing, is two along from Phillip. At this point he loudly says "Don't forget to do a sun!"*

*The teacher responds by saying "We don't have to do a sun." A girl laughs at Evan's comment.*

*Evan then turns to Mrs. Eagle, the parent helper who is next to him and says, "I've made a mistake" and covers up the corner of the picture. He does not wait for Mrs. Eagle to respond but turns to George on his right and whispers to him. Both boys are now hunched over their work. Evan finishes his drawing with one hand while covering half of it with the other.*

*Then a girl calls out "Mrs. Underwood, Evan's done a sun."*



*Before Mrs. Underwood has time to respond Evan calls out "So has George." Both boys look uncomfortable as children near them strain to see their drawings.*

Several sources of information influence drawing self-efficacy in this observation. Firstly the verbal persuasion, where Colin criticises Evan's drawing, would have had a negative effect on Evan. Secondly, verbal reactions from the teacher, about the sun in the drawing, were interpreted as negative by another child, and Evan was laughed at. He then shielded his drawing from the gaze of others. The teacher's neutral comment was re-interpreted by children as a negative comment, a reaction also observed by Bird (1994) when researching with a similar age group. Thirdly, as physiological state was influential on self-efficacy, these experiences were likely to have a negative effect on the drawing self-efficacy of Phillip, Evan and George.

Three new entrant children commented during interviews that they would not show their drawings to certain children, because those children were likely to say things such as "That's stupid." Although these children offered this information independently of each other, all three mentioned Phillip, and two mentioned Michael and Evan. These boys all had drawing self-efficacy scores below the class mean. This reflected other findings that suggested that children with low drawing self-efficacy were more likely to both give and receive criticism

Year one children, Harriet (112 QH) and Olivia (132 H), said they did 'quality' drawings by 'staying inside the lines' and believed there were right and wrong ways of drawing things. Harriet also believed there were 'proper' ways to draw some things and that boys and girls have different abilities when drawing people.

Harriet (Y1 112 QH)

*Rosemary: What makes your drawings really good?*

*Harriet: Because they are quality.*

*R: How do you know it is quality work?*

*H: Because I don't go over the lines. Quality drawing is where I do right animals and right things. Olivia helps me draw a dog, she shows me how. She usually draws them properly...I can only draw cats.*

*Rosemary: Who said it was the proper way?*

*H: Cos there's a computer game with a dog – that's the best way.*

*R: Are there best ways to draw lots of things?*

H: Yes.

R: People?

H: Yes. *[She then draws a picture of herself on a piece of paper.]*

H: All girls draw like that. Boys do it different – they do a T-shirt and shorts and feet. I can't draw bare feet – I make shoes instead. Boys are good at bare feet.

R: Are all boys good at drawing bare feet?

H: Yes, and not girls.

Harriet regarded Olivia's drawings, and computer images, as the right way to draw, and therefore as a source of vicarious self-efficacy information. Children spoke of making "mistakes" suggesting they had concepts about drawing correctly or incorrectly. These beliefs can have a powerful influence on interpreting experiences. For example Jared (Y2 125 QH), went from believing he was 'very good' at drawing to 'not really' good because of a specific incident where he "didn't colour in properly – went over the lines."

Mathew (Y2 127 H) suggested that those children who often rubbed out their drawings were not very good at drawing. When observed Mathew seldom used the eraser while Danyon, who had shown high self-efficacy but had since had a negative experience, turned over his page several times and rubbed out his drawing at least three times. Danyon's emotional response to his art was at times also linked to patterns of friendship.

Danyon (Y2 124 QH)

*I don't like doing people—if I don't like the person I am drawing. Sometimes I do a mistake of someone I don't like—sometimes I like them and then I forgot I didn't like them again—they keep on being mean to me—about my hockey playing and all that.*

While the younger children looked uncomfortable when others suggested they had made mistakes, year three children said they were embarrassed by mistakes and wanted to give up. Kristen (Y3 92 M) and Robert (Y3 92 M) both made comments about making mistakes or drawing something wrong and Robert commented on his inability to draw well because he didn't *know how to* draw well.

In the year four the contrast between the group of children who felt that they didn't make mistakes, and those that did was dramatic. It was noted that children with

high drawing self-efficacy would give criticism, as they believed this would help improve drawings. For example Rachel (Y4 130 H) explained how she sometimes commented on changes she thought were needed in her friends' drawings:

Rachel (Y4 130 H)

*Rachel: Sometimes I think they should change the pants or tops or something to make it look neater.*

*Rosemary: Do the kids ask you?*

*Rachel: Sometimes Kirsty, Jade and Tammy say that 'cos we tell each other 'cos we know we won't be disappointed.*

Not all children received the same types of comments. Although Lucy (Y4 110 QH) was Rachel's sister and sat at the same table she did not enjoy the same level of positive messages from her peers, and had a lower drawing self-efficacy. Lucy received comments about her drawing of people such as "It's not meant to look like a cartoon," and "You have to use the whole page." Social comparisons of outcomes influence self-appraisals (Bandura, 1986), and comparisons between Lucy and her sister Rachel were likely to lower Lucy's drawing self-efficacy, and raise Rachel's. Although, the twin sisters had very similar drawing styles, the children favoured Rachel's drawings.

Andrew (Y4 70 L) who had low drawing self-efficacy and sat with children with quite low to moderate drawing self-efficacy received comments such as "That sucks!" Comments such as this criticised the whole drawing while the more specific comments aimed at Lucy's drawing focused on elements of the drawing. Both sources of verbal persuasion were negative, and likely to decrease drawing self-efficacy.

While the teachers did not specifically make reference to right and wrong ways of drawing the children at all year levels developed criteria by which drawings were measured. These criteria appeared to reflect external standards applied to drawings, or an extension of criteria applied to other curriculum areas such as handwriting. Rachel, who had the highest drawing self-efficacy in the class, actively sought and gave constructive criticism. With that in mind it may be preferable for educators, as Gardner (1982) suggested, to enter into discussions with children about the various ways that drawings and art works can be valued so that critiquing can be a tool for all children, and not a hindrance.

## 6.06 Comments and Messages about Being Good at Drawing

Although children were not grouped or graded on drawing ability the children did not hesitate to nominate those they thought of as good or bad at drawing. At the new entrant level there was a positive relationship between those children who were thought of as good at drawing, and the drawing self-efficacy of those children. In questionnaire responses their peers nominated nine new entrant children as being good at drawing. Seven of these children were above the drawing self-efficacy mean for their year level. During the interviews the four children nominated as not being good at drawing, were at or below their year level mean. What others thought of a child's ability might be translated into verbal and non-verbal messages that would influence that child's own beliefs and could be linked to features such as 'scribbling' or ability to 'draw numbers and letters.'

The following excerpts illustrated both verbal and non verbal messages about being good at drawing. In the first interaction Ursula spoke to Fran, who was regarded as a less able peer, as though speaking to a less mature person (Cox, 1991), and sent subtle messages about perceived ability. The interaction between Evan and two other boys was more blatant, and as verbal persuasion is a source of self-efficacy information, both of these situations were likely to influence drawing self-efficacy.

### Fran (NE 104 M)

*Again Fran looks at the others' drawings. At this point Ursula (NE 115 QH) says "Pretty Fran. You can do someone else...good girl." The tone while friendly and supportive is one I would have expected to be used when addressing a significantly younger child. Ursula then reaches over and draws another ear on Fran's drawing and Fran appears quite happy with this action, although she did not ask for any help.*

### Evan (NE 81 QL)

*The children are drawing a picture of themselves and their friend. Michael (109 QH) turns to Aaron (108 QH) and compares hair fringes before drawing one on the drawing of himself. Evan has wriggled closer when the boys are talking and carries on with his drawing. Aaron looks up and says to no one in particular (although Evan's recent proximity would suggest he has prompted the comment);*

*"Yours looks dumb." No one looks up or acknowledges the comment but I am sure it was heard.*

*After ten minutes the children start to hand in their completed drawings. During the handing in process Michael and Aaron take the opportunity to tell Evan they don't like his drawing (suggesting the earlier comment was also aimed at him). This time however Mrs. Underwood hears and the boys are told not to be mean to Evan.*

Kenny (Y1 96 M) told me that another boy called his drawings *stupid*. Both *stupid* and *dumb* were negative adjectives linked to intellectual capacities, insulting the person and their drawing. Paul (Y2 94 M), who had the second lowest drawing self-efficacy in his class said that he didn't like showing others his drawing because they would say "Your's sucks." The observations revealed that children made unpleasant statements about Paul's drawings, criticised him for starting too soon, and teased him about his name. By contrast Mandy (NE 138 H), Lydia (NE 121 QH) and Bronwyn (NE 117 QH) told me their friends and family said their drawings were *pretty*, *beautiful*, and *cool* which were positive messages associated with images. *Pretty* and *beautiful* were positive comments for these girls but they were adjectives that boys may have disliked.

Messages about drawing were sometimes linked to other aspects of a child's experiences or to earlier experiences. Nicholas (Y4 78 QL) recalled being laughed at "a couple of years ago." He recalled "They laughed at my drawing because it looked funny." Andrew discussed how the reactions he got to his drawings were part of a pattern of verbal insults.

Andrew (Y4 70 L)

*Andrew: Sometimes the kids, Adam, laugh at my drawings—'cause it looks funny—doesn't turn out the way I want it to...that makes me feel sad, hurts my feelings. I just ignore them.*

*Rosemary: Do you think you are one of the kids who has not-nice things said about your drawings, quite often?*

*A: Yeah about three times a day—like Adam and Nicholas and Eric. Sometimes they make fun of me when I fall over, they sometimes laugh. They go [Andrew makes a snort/snigger noise].*

*R: Do you fall over more than they do?*

A: *Yeah.*

R: *How come?*

A: *Don't know. But like when I was playing softball I was playing my hardest but I tripped over about three times. Once I got second in cross-country. Sometimes they are just jealous 'cause I beat them at some things.*

R: *Are girls mean?*

A: *Some—Rachel, Esme.*

R: *About what?*

A: *Say I love some girls 'cause I played with them.*

Andrew was a year four boy who had the lowest drawing self-efficacy in the sample. McInerney & McInerney (1998) suggested that as children grow older and have more academic and non-academic experiences, their self-concepts become more differentiated and less positive. Therefore, Andrew's drawing self-efficacy while specific to drawing, may also be part of wider patterns of experiences and self-concepts.

Sometimes children aligned their judgement of who was good at drawing with measures of friendship. Children cared about how they are judged and identified those that they believed provided positive emotional experiences and responses, and avoided those that threatened their emotional well being. Thomas (Y1 124 QH) said Kenny was now good at drawing because he was now his friend, and Mandy (NE 138 H) said two girls were good at drawing because they played with her. Children showed reluctance to show their drawings to other children who were not their friends. For example Mary (Y1 103 M) didn't show Sophie her drawings "because she doesn't like me."

The three children in year three with the lowest drawing self-efficacy all said that other children were negative about their drawings. Robert (Y3 92 M) not only felt he was the worst in the class at drawing but said that the other boys said mean things about his drawings. Kerryann (Y3 94 M) was aware of how her drawings compared to those of others and said that children would say "Your work isn't that good." Also Kerryann said that she didn't like doing art with Samantha "Because Samantha does better work than me."



Performance attainment is highly influential on self-efficacy and success is sometimes linked to tangible awards. Patrick (Y3 118 QH) named three children who he thought were good at art, because they had won art prizes at the local A&P show. Patrick had also exhibited at the A&P show and he liked to have his drawings displayed at school because "Sometimes friends can say neat things about them." Danyon (Y2 124 QH) was excited about undertaking a watercolour project and told the class "I got an award for that." Jared also related the teacher's sticker reward system to indicators of how well a person could draw.

Jared (Y2 125 QH)

*Rosemary: Who do you show your drawings to?*

*Jared: The teacher.*

*R: What does she say?*

*J: "Good" and gives me a sticker.*

*R: Does everyone get a sticker?*

*J: If they do good work.*

*R: Do some children not get stickers?*

*J: Yeah, Kelvin doesn't—and that's all who doesn't get stickers very much. Just Kelvin because he doesn't draw very good—and Wayne, he's new, he takes too long.*

Teachers' comments and praise appeared to have powerful effect on some children. Nancy (Y2 117 QH) received a positive comment from the teacher and announced to the rest of her group, "I don't know why I'm a good drawer. I just am." Rachel (Y4 130 H) recalled a specific experience in which her drawings were praised by the teacher. Although it may not have been a significant event for the teacher, for Rachel it was a defining moment in her drawing confidence and reputation.

Rachel (Y4 130 H)

*Rachel: When in Room One Mrs. Taylor drew a dog and I copied her from doing a dog. She said "Good dog Rachel" and then when I was in Room Three I started to draw it a bit differently... with a different face.*

*Rosemary: So you remember something nice that someone said three years ago?*

*Rachel: Yeah. (Laughs)*



*Rosemary: Can you remember other special times when people said nice things?*

*Rachel: Um (pause), I always say ...I say [nice things] to Tammy and sometimes Tammy says to me. Jade and Rose and me and Tammy are all – we say “Do you like my picture?” and Tammy... and they always say “Yes.”*

*Rosemary: Do you think their comments make you more confident at Art?*

*Rachel: Yeah, sort of.*

*Rosemary: What other reasons?*

*Rachel: Because I know I can do it.*

Verbal persuasion is a source of self-efficacy information but Rachel's comment that she knows she 'can do it' made the teacher's and friends' positive comments more potent. According to Bandura (1986) positive persuasion has the greatest impact on those who already believe themselves capable of successfully undertaking the task. Likewise negative persuasion or messages such as the ones Nicholas, Andrew, Evan or Kenny received have the greatest effect on those who doubt their ability to act successfully.

At the year four level it was noted that the children engaged in verbal interactions and self-talk that reflected their drawing self-efficacy levels. Schunk (1998) noted that children of various abilities and confidence in Mathematics also displayed differing patterns of verbal interaction and self-talk. Andrew, who had low drawing self-efficacy, was verbally self-critical as were children working in the same group. Over two observations comments about their own drawings and ability included the following self-criticisms.

Nicholas (Y4 78 QL)

*I can't do this.*

Peter (Y4 88 QL)

*I hate doing this.*

Jasmine (Y4 103 M)

*I've forgotten how to draw T-shirts.*

Barry (Y3 108 QH)

*It's dumb. I don't like it.*

Doug (Y4 91 QL)

*I can't draw people.*

Andrew (Y4 70 L)

*I can't draw hands...they're too fat man!*

*I can't draw real things.*

*My drawing sucks!*

As these children sat together the drawing experience would offer vicarious experiences of watching others struggle with drawing, verbal comments from self and others, negative physiological states associated with the stress of failing, and negative performance attainment. The social setting and interactions of this group were optimal in promoting low drawing self-efficacy. Such interactions needed to be monitored by the teacher, and positive interventions, and modelling of strategies provided. On a subsequent visit I again observed Nicholas struggling with drawing and he asked me for help. I modelled how he might go about drawing the toy dog, by looking at and identifying the main shapes and connecting these. He responded positively to the experience, and appeared to enjoy drawing as he drew several drawings that he was proud of.

## **6.07 Strategies Used when Drawing**

The children made comments about the strategies that they used when they had problems, and suggested the reasons why they could draw well. Three themes emerged from these comments. These were (a) effort and ability, (b) persistence, and (c) modelling.

### **Effort and Ability**

The new entrant to year two children considered success or ability in drawing to be the result of effort and practice. This was consistent with research that suggested that younger children did not differentiate between effort and ability (Bird, 1994; Nicholls, 1984, 1989). Christopher (Y1 123 QH) and Mandy (NE 138 H) attributed their successful drawing to effort in the form of practice. Keith (Y1 104 M), who had moderate drawing self-efficacy believed he would get better at drawing as he grew older and had more practice although he commented on the difficulty he sometimes had in controlling the materials.

Rachel, a year four child believed that success was a matter of effort and neatness. Rachel partially differentiated between effort and ability and the role of self-belief when she suggested that children lack confidence because they *think* they cannot draw something right, but at the same time effort would overcome this problem.

Rachel (Y4 130 H)

*Rosemary: In class what helps children to feel happy when they draw and become more confident?*

*Rachel: To say "That's neat."*

*Rosemary: Does the teacher say that a lot?*

*Rachel: When everyone makes a really good effort.*

*Rosemary: What other ways can we help children to feel better about their drawings?*

*Rachel: To say that – do it really neat and make a lot of effort.*

*Rosemary: What is bad for confidence or makes the children feel bad?*

*Rachel: Sometimes Mrs. Walker might say to someone that the head is too big.*

*Rosemary: Why do you think some kids are not confident?*

*Rachel: Because they think "I can't do the legs right" – or the mouth or something.*

*Rosemary: Do you think everyone could learn to be good at drawing?*

*Rachel: Yeah, if they try hard.*

Children in year three and four spoke of ability in terms of knowing how to draw. Robert (Y3 92 M), who had the lowest drawing self-efficacy level in his class said he *didn't know how* to draw, suggesting that he felt he lacked the ability to solve drawing problems. On the other hand several children with high drawing self-efficacy spoke of being able to learn how to draw well. Zoe (Y3 102 M) was thought of by her friends as good at drawing because she went to 'artist lessons' after school. Olive (Y3 120 QH) said she only made mistakes because people talked to her and she can't concentrate and Judy (Y3 118 QH) liked drawing at school because she could 'learn lots' and her older cousin had taught her how to draw dogs.

Eastbank School had a reputation for well-developed arts programmes, and observations showed that teachers did model procedures and encouraged children to think about drawing strategies. However, for some children such as Robert (Y3 92

M), individual and specific guidance may have raised his drawing self-efficacy. Without teaching intervention, Robert's frustration at not knowing *how* to draw, in time may be replaced with comments, similar to those of Andrew and Nicholas in year four, of *I can't draw*.

### **Persistence**

Associated with concepts of effort was the belief that persistence would lead to success. Mandy (NE 138 H) expected to be successful when drawing and like Lydia (NE 121 QH) she did not give-up if she had a problem. Lydia said she would just start again if she had a problem while Jenny (NE 97 M) said she would throw her drawing in the rubbish or get Dad to do it for her. These reactions to difficulty are consistent with self-efficacy theory and research that suggested that those with high self-efficacy were more persistent (Zimmerman 1995, Bandura, 1986, 1995).

### **Modelling**

Christopher (Y1 123 QH), Patrick (Y3 118 QH) and Rachel (Y4 130 H), all ranked highly in their class drawing self-efficacy, and were aware of the way the teacher modelling of drawing strategies helped them to draw.

#### Christopher (Y1 123 QH)

*[Christopher draws a person for me]*

*R: How do you know how to draw people like that?*

*C: 'Cos Mrs. Taylor does half of it on her paper and I do it like that.*

#### Patrick (Y3 118 QH)

*Rosemary: What do you mostly do when you have trouble with a drawing?*

*Patrick: I just think about what she (the teacher) said.*

*R: What about at home?*

*P: I just go over in my mind what I want to do again.*

#### Rachel (Y4 130 H)

*Rachel: Katie says cool dog!*

*Rosemary: How did you learn to draw cool dogs?*

*Rachel: When I was in Room One Mrs. Taylor drew a dog, and I copied her from doing a dog...and then when I was in Room Three I started to draw it a bit differently.*

Modelling is most effective on raising self-efficacy for those who judge themselves capable of the task (Bandura, 1986). Furthermore, for the modelling to

bring about positive results the modelling conveys information about the nature of the task, the task must be achievable, and the task must be modelled by someone that the children judge as credible. For younger children, or those with lower drawing self-efficacy, this same modelling may not prove helpful if the task appears unachievable, or the information conveyed is outside of their understanding. Evelyn, who had the second lowest drawing self-efficacy level in her class, and Thomas, who is one of the youngest children in his class commented on these aspects.

Evelyn (Y1 98 M)

*Evelyn: I don't like drawing with the others and sometimes I have trouble catching up.*

Thomas (Y1 124 QH)

*Thomas: Drawing fish was easy peasy.*

*Rosemary: Do you always find drawing easy peasy?*

*T: Not really.*

*R: When is it hard?*

*T: Only when people tell me what to do because I don't understand what they are saying.*

Teachers and children provide drawing self-efficacy information through modelling. The role of teachers, which is discussed later in this chapter, is regarded by many as vital to self-efficacy development. The role of children in providing peer modelling is seldom explored in the visual arts. The pairing or grouping of children to facilitate scaffolded learning is used in other collaborative or cooperative learning situations. However in the area of the visual arts conflict exists with regards to a valued component of art – that of originality or ownership of ideas. Therefore children are often discouraged from helping one another or sharing successful strategies or ideas, although modelling is most effective when learners and models have similar personal characteristics (Bandura, 1986).

## **6.08 Ownership of Ideas and Topics**

Two main themes emerged that related to the themes of images drawn by children. These were, (a) the drawing of favourite topics and how these were regarded as boys' or girls' topics, and (b) the ownership of ideas.

### **Favourite Topics: Boys' or Girls' Topics**

Comments by children across the year levels revealed that children had favourite drawing topics, which contributed towards their reputations as good drawers. Children who had favourite topics often used a set sequence of lines and shapes to create their image. At the kindergarten level the drawing of dinosaurs was very popular, but usually confined to the boys. Mandy (NE) and Rose (Y4) drew cats, and Judy (Y3) and Rachel (Y4) were recognised for their ability to draw dogs. Mandy and Rachel had the highest drawing self-efficacy levels in their classes, Judy had the second highest, and Rose the fifth highest. These children's favourite drawing topics were likely to receive positive feedback from peers and teachers and to be acceptable in the classroom.

Some children had favourite topics that were not so readily acceptable in the classroom. Comments also suggested that certain topics were regarded as either boys' or girls' topics. In the following excerpt a boy commented that flowers were a girl's topic. The recipient regarded this as an insult and retaliated by correcting his colour identification.

Mandy (NE 138 H), Michael (NE 109 QH)

*By this time the rest of the class are settling and the teacher looks ready to start the lesson. Mandy sits up straight with her arms and legs folded, and looks at the teacher. Michael notices they have flowers to draw and says to Mandy "You like flowers 'cos you're a girl."*

*She replies, "Great...now everyone knows what I like!" Mandy does not look happy about the comment.*

*Mandy and Michael continue to give each other frowns and pull faces. Mandy loudly disagrees with Michael when he says they are blue flowers, saying they are purple.*

Jonah (Y3 120 QH) who shared the highest drawing self-efficacy level in his year three class, also believed that boys and girls drew different topics. Jonah told me about his secret drawings, as he drew 'killing drawings' of war, shooting and violence. As this topic was unlikely to be sanctioned at school or home, he and his brother and some friends drew them in secret – he had taken his drawings underground. Jonah was sure that his parents or teacher would "chuck them out" if

they saw them. If he couldn't do killing drawings he would have liked to draw "Goosebump scary pictures." Johan seemed to enjoy the excitement of his drawings and wished that the teacher would let him draw killing pictures in class. Jonah believed that boys and girls were capable of drawing different topics.

Jonah (Y3 120 QH)

*Rosemary: Do girls like doing action pictures too?*

*Jonah: No. Only the boys.*

*R: Don't girls draw things like that?*

*J: No. Only Barbies.*

*R: What else?*

*J: Non violent things.*

*R: Why do girls draw Barbies?*

*J: Because they like them.*

Although Andrew (Y4 70 L) had the low drawing self-efficacy he had a favourite drawing topic. While frustrated with his drawing in class, Andrew believed he was getting "better and better and better" because he was drawing DragonballZ in his spare time. Nicholas (Y4 78 QL) also believed his drawing was improving because he could now draw DragonballZ. This topic was based on a television cartoon character, and as the classroom art programme was unlikely to focus on popular media characters, this topic was not as versatile in the classroom as the topics the girls were drawing. To gain an insight into how children responded to drawing their own topic at the year four level, one of the observed drawing sessions was free choice of topic.

Andrew (Y4 70 L)

*In contrast to the previous observations Andrew appeared to be fully involved and motivated during this session. He, along with several other boys drew pictures of their favourite television characters embarking on various adventures. Their enjoyment of the drawing process and the resulting pictures were in stark contrast to yesterday's session.*

In general the girls appeared to enjoy the activity of drawing more than the boys did. However boys drawing for enjoyment and social interaction was observed when a pair of year three boys drew together, laughing and making sound effect as they drew pictures of each other playing rugby. However they were reprimanded for



making “silly noises” and when this happened they quickly completed their drawings and handed them in. The initial enjoyment and interaction between the boys was reminiscent of the four-year-old boys drawing and playing together on their favourite topics of dinosaurs and television characters.

### **Ownership of Ideas**

Children up to year two openly looked at each other drawings, and in some classes were encouraged to view and react to others’ drawings. However in year three and four ownership of ideas was an issue. The following interaction between Kristen (Y3 92 M), who had lowest drawing self-efficacy level in her class, and Judy (Y3 118 QH) who had the second highest, illustrated this.

Judy (Y3 118 QH) and Kristen (Y3 92 M)

*Judy is drawing a picture of herself and a friend in a swimming pool. Kristen, who is watching her draw, turns over her drawing and also draws a swimming pool scene. Although I do not comment she looks up and tells me she doesn’t like the other one. However I have the impression that viewing Judy’s drawing has influenced her decision.*

*After watching an interaction between two girls at her table Judy returns to her own drawing and again visualises her drawing by using hand movements and light pencil lines. Kristen watches her as she does this. Judy then notices Kristen’s drawing of a swimming pool and says, “Copy cat Kristen.”*

*Kristen shows no outward reaction to this. However she seems to loose interest in her drawing and draws very little after this point.*

Comments about “doing your own work” were a feature of the drawing sessions in the year four class. The children and teacher made comments about copying, and the ownership of ideas was also a controversial issue amongst some of the children. During the drawing session, based on free choice of topic, the following was recorded.

Y4: Rachel (130 H), Tammy (119 QH), Jade (125 QH),

Rose (118 QH), Lucy (110 QH)

*Mrs. Walker again talks to the class in general and reminds them that they must do their own. I imagine this refers not only to the physical act of making one’s own marks but also to not drawing the same as*

*topic as another child. This may be problematic when many children share the same interests and are motivated by the same visual images seen on television, popular labels and books.*

*Rachel is drawing, apparently fully absorbed in the process. Tammy, Jade and Lucy however are in a heated conversation and I can clearly hear "You don't know!" I am sitting next to Lucy and she is about to tell me something about her drawing when Tammy and Jade tell me "She didn't make it up." Lucy looks unhappy at these unwelcome comments and discontinues what she was about to say.*

*Mrs. Walker is aware of the tension amongst the girls today and tells me it is the result of an incident the previous day in which Rose went into Lucy's computer file to see and copy her pictures. This undercurrent is amongst the girls and Tammy has on several occasions commented to others about copying. Rachel is quite removed from these comments but Rose seems to come under scrutiny from Tammy and Jade. The other girls exclude Rose when they look towards each other's drawings and acknowledge one other.*

*Lucy rubs out yet again. She has done little since the girls suggested her idea wasn't original. She has decided to draw cats and gets a new piece of paper. I ask her why she has decided to draw cats and Tammy answers for her saying "Because Rose was." This is an interesting comment considering that it is Rose who is in trouble with the girls for copying Lucy. The comment however, would appear to register with Lucy because she draws for thirty seconds and then turns over and draws a dog instead.*

The issue of ownership of ideas and originality is inherently problematic. With this age group, and even perhaps from a teacher's perspective, to draw the same topic as another child is to copy. However a single topic, such as a cat, can be visually represented in an infinite number of ways. Indeed some artists explore the same topic for years or even a lifetime without exhausting the possibilities. In the classroom the first child to draw a topic, or who has a reputation for drawing that topic, is given the right of ownership. This then limits the range of topics available for others to draw that will gain them positive recognition.

## **6.09 Teacher Comments and Messages**

The overall impression of the teachers' interactions with the children and the comments they made about children's drawings, was a positive one. Each teacher had their own style, but all used comments and questions to extend children's thinking, help them solve problems, and to provide direction and motivation. The teachers in the new entrant and year one classes also drew images on a whiteboard or paper which helped the children to visually understand the thinking and drawing processes. For every observation the way the teacher introduced the session and interacted with the children was recorded. The following provides insights into the comments and messages teachers gave about drawing.

### **New Entrants**

The teacher, Mrs. Underwood, used comments and questions to extend the children's thinking, to motivate and direct, to give praise about appropriate behaviour and to comment on the elements of the drawing. She used books and modelling to motivate the children and to guide them through a scaffolded learning experience. For example she would read a picture book and discuss the drawings. Then she would ask the children to describe the drawings in terms of shapes and lines. Then the children would use their finger as a sort of magic marker and model the shape in the air. Then they would use their "magic finger" to model the lines onto paper without making a mark. Having experienced this build up, the children would then use pencil and paper to make their own drawings. At no stage in the any of the observations did the teacher give negative comments or messages, and she did not criticise or make comments about children drawing correctly. Once the children had started she responded to individual comments and questions, but did not initiate comment about any individual child's drawing.

### **Year One**

Mrs. Taylor in the year one class appeared comfortable modelling the drawing process for the children and she often gave positive feedback. It was noted that five of the eight children interviewed used the word "quality" to describe good drawings and when they reported on the teacher's comments. Christopher, who had the third highest drawing self-efficacy level in the class, discussed the origin of this word and the way he viewed the measuring of quality.

Christopher (Y1 123 QH)

*Rosemary: What does Mrs. Taylor say about your drawings?*

*Christopher: She sometimes says, "Quality."*

*R: What makes them quality?*

*C: They get better and better.*

*R: Do you know when they are quality or do you have to find out from Mrs. Taylor?*

*C: From Mrs. Taylor.*

*R: Can't you tell yourself?*

*C: No.*

*R: How does she know?*

*C: Because she is the teacher.*

*R: How do you know it is quality?*

*C: Because Mrs. Taylor gives it stamps...and principal's sticker.*

*R: Do you get more stamps than other kids do?*

*C: Yeah – four or five stamps for drawing. Others get ticks – when they don't do quality work...when they scribble all over their writing. They get a tick for their drawings...a tick is not quality.*

*R: How does Mrs. Taylor decide?*

*C: She looks at it and thinks it's a stamp or a tick.*

*R: Do you always agree with the teacher?*

*C: Yes.*

"Quality learning" was part of Eastbank School's mission statement and was likely to be applied to many curriculum areas. While the teacher did not comment on there being a right and wrong way to draw, some children related 'quality' to drawing correctly. Although children made judgements about each other based on the teacher's comments, all comments that the teacher made were kind and supportive. She used humour and questioning to encourage the children to contribute ideas. While Mrs. Taylor did not make specific comments, the way in which a lesson was taught could have many messages. The following was typical of her approach.

Mrs. Taylor (Y1 Teacher)

*Mrs. Taylor sets the scene for the drawing activity by reminding the children that next week the school holidays begin and they will be*

away from school for two weeks. Children react positively to this, one stating that two weeks is the same as fourteen days. The teacher reacts with warmth to the children's comments and reactions. She then goes on to explain that it would be really nice to have a portrait of each person so she will not forget their faces and names during the holidays.

The teacher models thinking about how she would draw her own picture using thoughtful looks, looking at her clothes and arms etc. She suggests she would probably like to use her paper portrait rather than landscape format. Jared suggests she could use the space better that way and Mrs. Taylor tells him that is a good idea.

Next Mrs. Taylor moves from modelling the thought process to using her finger to model the outline of the drawing. She then changes to pencil and starts to draw a simple but detailed drawing of herself, on the paper clipped to the whiteboard. The drawing is deliberately simple and child-like, and the children accept this as her drawing style. Again the teacher models looking at her self, thinking and drawing.

At this point Bryan calls out, "I'm not really good at drawing me – and my hair sticks up."

The teacher responds by saying "But that looks cool – when it is a hot day and we get sweaty our hair does stick up."

Several children turn to Bryan and offer agreement. Then he asks "Can we do patterns on our t-shirts?"

This time some children react, before Mrs. Taylor can respond, by turning around and giving him a stern look.

Meanwhile the teacher continues to draw her picture and all but two children, who are at the back, watch with an attitude of interest. At this point Mrs. Taylor comments on how she has chosen to draw her hair down, although it is tied up today, as it is easier to draw this way. Eight minutes after the modelling has begun Mrs. Taylor announces she has finished.

"Have I drawn everything?" she asks.

*"Yes" chorus the children.*

*Then the teacher says, "I know what I forgot" and draws pockets.*

Critics of structured art lessons could criticise this approach for stifling children's creativity while advocates could suggest that such an approach provided a model of both the process and the possible outcome. As such the demonstration could empower the children. A demonstration like this did not make comment about children's drawing ability but it did impart a few messages such as the following.

- Drawings could have a purpose, such as drawing a portrait.
- Drawing required thought, decision-making and planning.
- The teacher's simple drawing style encouraged the children to believe that they could also achieve such an outcome.
- The teacher's acceptance of Bryan's concerns assured him, and others, not to worry about small difficulties.
- Deciding to draw the hair the 'easy way' suggested that creative problem solving and differences were acceptable.
- Adding detail after she said she had finished suggested that it was good to critique and extend the drawing and to return to it if necessary.

As noted earlier the modelling of approaches to drawing proved to be efficacious to a year four child Rachel (130 H), who attributed her ability to draw dogs to her experiences in Mrs. Taylor's room three years earlier.

## **Year Two**

The teacher, Mrs. Baxter, interacted with the children throughout the art lessons giving positive feedback about appropriate behaviour and aspects of their drawing. At the beginning of the session she provided motivation in the form of looking at the subject to be drawn and asking questions about size, shape and the connection of parts. She clearly outlined the way in which the children were expected to proceed in terms of the processes and time management. She encouraged the children to view and react to each other's art works and was quick to discourage negative comments.

During the lesson children's art works were often held up as examples to others of drawings that were progressing well. She would be specific in her comments such as, "I love the way Antony is making observations." However over the four observations the same boy was praised on three occasions. This boy appeared to enjoy the attention and at the time of interviews had the fourth highest self-efficacy score.

Children were encouraged to accept their mistakes. For example when Rosalie said of her drawing "I made the puppy's tummy too big," Mrs. Baxter replied "Maybe he's just had dinner." At no stage was the teacher critical of a child's drawing although she had clear expectations of behaviour and ways of working.

### **Year Three**

The year three class had two teachers, and Mrs. Hood took the art sessions. As with previous observations the teacher interacted with the children in a positive and consistent manner. She started each lesson with an introduction to the topic and asked questions designed to get the children thinking about how they would go about drawing their topic. Mrs. Hood tended to give general positive feedback to keep the children motivated but was not observed extending individual children or talking about elements of their drawings. She discouraged negative comments between children and was never negatively critical of the children's drawings or drawing ability. However at times the children still attributed negative reactions to the teacher. An earlier excerpt noted Kerryann (Y3 94 M) being reluctant to hand in her drawing in case she got a 'growl' for messy drawing. Kristen, who had the lowest drawing self-efficacy levels in her class, also expected negative comments from the teacher.

#### Kristen (Y3 92 M)

*Kristen: I try to draw a good picture.*

*Rosemary: What happens?*

*K: I do a mistake.*

*R: What happens when you do a mistake?*

*K: Get told off.*

*R: By whom?*

*K: Usually Mrs. Hood. She says fix it up...she's not really growly.*

### **Year Four**

The year four teacher, Mrs. Walker provided less structured introductions to the drawing sessions than the other teachers did. She was, however clear in explaining her expectations of behaviour and was aware of children who needed extra support. She also insisted that the children drew their own pictures, and did not copy someone. The following excerpt, in which the children are drawing a picture of their family, provides an example of this.

#### Mrs. Walker (Y4 teacher)



*For the third time Doug (Y4 91 M) calls out and Mrs. Walker sternly tells him not to. The children start drawing and the teacher moves amongst the children.*

*Doug says "But I can't draw people."*

*Mrs. Walker replies "I think you can" and refers to a drawing on the wall that Doug did some time ago. He again clarifies who he is to draw in his picture. At this point Mrs. Walker decides further clarification and motivation may benefit all the children.*

*Mrs. Walker moves to the front of the room and asks for the class's attention. Although I would have preferred to stay in my role of observer Mrs. Walker asks me to come to the front of the room along with three children and she discusses differences in heights and appearances and how children might draw these differences. She asks children questions about sizes and hair etc. and the children put the hands up to answer.*

*After the children have drawn for a while Mrs. Walker comments on how well the children are going. Up to this point the children have worked in silence, or whispers as they have been requested to. Mrs. Walker tells the children they may now talk quietly (after I discuss with her how the silence rule makes observations difficult). She also adds, "You must remember it is your own work." This comment appears to refer to not copying from others and clearly gives the message that to do so would be wrong. Some of the girls also made comments about copying, which would suggest the children also held these views.*

While Rachel recalled the positive effect of praise (see p. 103) Andrew commented on the impact teacher comments had on children's confidence.

Andrew (Y4 70 L)

*Rosemary: Does the teachers say nice things?*

*Andrew: Yeah sometimes – they say nice things about Nellie's.*

*R: Can you remember a time they said a nice thing to you?*

*A: Not really.*

*R: Can you remember a time that a teacher's comment made you upset or embarrassed?*

*A: Told to put more impact in it.*

*R: How could you do that?*

*A: I don't know.*

*R: Do you think it would have been more helpful if she had said something different?*

*A: Yeah.*

*R: What?*

*A: "That looks good."*

*R: Do you like big art exhibitions like the one in the hall at the moment?*

*A: Sometimes I don't 'cause I made this glass picture [Andrew tells me about his lighthouse drawing on glass which he thought was not very good but it got hung up anyway. Andrew would have liked to have tried to do it again.]*

*R: So if the lighthouse didn't turn out well would you want the teacher to tell you it wasn't very good?*

*A: No.*

*R: Would you like to tell her that you wanted to do it again?*

*A: Um—yeah—I don't want to really, because I thought she would say no.*

*R: Do you find it better when the teacher teaches you something or when you just do what you like?*

*A: Do what you like to.*

*R: What would you draw?*

*A: DragonballZ.*

Although the year four teacher was positive and supportive of the children's drawing, children were nevertheless vulnerable to criticism, or perceived criticism. For comments about drawing to be helpful to Andrew they needed to be ones that he could act upon. The concept of 'impact' was beyond his present perceived ability, and as such was not achievable. Also Andrew did have a drawing topic that he enjoyed drawing and felt he drew well. However the topic was not one that he was encouraged to draw in class time. The topics he did draw in class, such as the lighthouse, he felt the need to revisit, but was sure that he would not be allowed to.

Consequently his artwork that was on public display was a source of embarrassment to him, and reinforced his low drawing self-efficacy.

## **6.10 Summary of Themes**

Both the interviews and the observations generated a wealth of data about comments and messages that impact on drawing self-efficacy. The difference between the kindergarten's and the school's physical and social settings was noted. School offered less opportunity for physical activity and children were expected to participate in all activities including drawing. For some children this may have been their first experience of drawing in an educational setting. Although seating arrangement were generally mixed sex grouping, self-selected interactions again favoured same-sex groupings. In same-sex groupings the types of verbal exchanges and the nature of interactions suggested that at times the experiences of boys and girls contrasted greatly, with the girls enjoying more positive messages.

Regardless of gender, children with high drawing self-efficacy appeared to have more confidence and power in the classroom, and exchanged more positive messages about drawing than those with lower drawing self-efficacy. Also children interpreted messages in light of other aspects of current or earlier experiences. One child for example linked criticism about his drawings to tripping over while playing softball, while another expected to have her drawing criticised because she did messy handwriting.

Children commented on scribbling as bad drawing especially in the new entrant and the year one levels. Comments linking drawing to reading and writing abilities continued to emerge amongst the school children with some of the younger children referring to writing as a form of drawing. Some children judged other's drawing abilities based on their reading and writing ability, and derogatory comments about reading or writing were used to insult.

While the teachers did not comment about the right and wrong ways to draw, the children appeared to want some guidelines to measure success by, and at times would transfer criteria applied to other curriculum areas. Although children were not grouped or graded for their drawing ability the children had no hesitation in nominating those they thought of as good or bad at drawing. Sometimes, especially in the younger age groups, these judgements were linked to features such as scribbling

or ability to draw numbers and letters. Some older children measured success by external rewards, such as stickers, principal awards and prizes at shows.

In general, children appeared to enjoy the drawing sessions. However observations showed that when children were critical of each other's drawings, those subjected to criticism appeared unhappy with, or embarrassed by the attention. Also at times the teacher's neutral comments, directed at a child with low self-efficacy were re-interpreted as negative comments. Emotional responses to art were also linked to patterns of friendship, where children praised others for their drawings, because they were friends, and avoided comments from others, for fear of criticism. Children were sensitive to the comments of other children and during interviews several children said they expected negative or positive comments from others. Children gave and received similar comments – those that expected negative comments often gave negative feedback, while those who received positive feedback also gave it.

Comments about drawing strategies suggested that the new entrant to year two children considered successful drawing to be the result of effort and practice. Children with higher drawing self-efficacy believed that persistence would lead to success. An emphasis on effort rather than ability ran through all the levels but by year four one child with high drawing self-efficacy commented on self-belief as a reason for success or failure. She suggested that children lacked confidence because they *think* they cannot draw something right, but at the same time she believed that effort would overcome this problem. Year three and four children spoke of knowing how to, or not knowing how to draw. Comments about not knowing how to draw suggested that these children felt frustrated and mystified by the drawing process, and they may have benefited from specific lessons on drawing techniques and processes.

Children who had a reputation for drawing a specific topic were often at an advantage, as others were discouraged from drawing in a similar style, or copying. However not all topics were readily accepted in the classroom, and the boys who liked to draw television characters or drawings depicting violence, did not usually have the opportunity to show their skills during art sessions.

The teachers were very positive towards the children and used comments and questions to extend children's thinking, help them solve problems, focus their observations, and to provide direction and motivation. In the new entrant and year

one classes the teachers modelled the drawing process by talking about and drawing an image on the whiteboard. This helped the children to visually understand the thinking and drawing processes, and no child directly copied the teacher's drawing. The teachers generally responded to specific questions but did not initiate discussion about the content or elements of a child's drawing, except in one class where children's drawings were held up and discussed, and children were encouraged to make positive and specific comments on each other's drawings. The children appeared comfortable with this process, and children appeared to enjoy having their drawings selected for discussion.

## **CHAPTER SEVEN**

### **DISCUSSION**

#### **7.01 Introduction**

The previous three chapters presented data on the drawing self-efficacy levels of four to nine-year-old children, significant differences in drawing self-efficacy levels in terms of gender and year levels, and identified themes and messages that emerged from the observations and interviews. This chapter discusses the findings in relation to:

1. Sources of drawing self-efficacy information
2. Messages and gender
3. Messages and year level
4. Messages and drawing self-efficacy levels.

#### **7.02 Sources of Drawing Self-Efficacy Information**

Bandura (1986) suggested four main sources of self-efficacy information – performance attainment, vicarious experience, verbal persuasion and physiological state. These four sources provided a basis for the questionnaire, and were evident throughout the discussion of findings from interviews and questionnaires. This section summarises the key features of each of these sources over the research sample.

##### **Performance Attainment**

At the kindergarten, children had free access to several art areas and children most frequently drew at a table set up for collage, drawing images that were based on television characters, dinosaurs, people and animals. Girls were proportionally more highly represented than boys were, and observations suggested that some children did not draw while at kindergarten. Data revealed statistically significant differences for gender with girls reporting more positive self-efficacy beliefs regarding preferences for art activities than boys did. There was also significant difference between year levels and gender for preference for art activities. Ranking the mean scores for preference from highest to lowest showed that year two children had the highest

preference response followed by year three, year four, year one, and new entrant children. Kindergarten children showed the lowest preference mean. As preference would influence drawing experience, and experience is the most powerful source of self-efficacy information (Bandura, 1986), children who did not draw were less likely to develop drawing skills that would assist in creating positive performance attainment.

Kindergarten children generally chose their own topics and drew at their own pace, with little or no teacher guidance or motivation. While the teachers accepted all drawing styles, children were critical of non-representational drawings. Therefore older children, and those with more drawing experience were more likely to experience positive drawing performance. Also, as children regarded writing as a form of drawing, those capable of writing also experience more positive performance outcomes.

At school all children were obliged to participate in drawing sessions. For some new entrant children this may have been their first experience of drawing in an educational setting. The teachers tended to offer guidance and motivation at the school level, and children were expected to develop drawings based on a set theme or topic. Some children received stickers and awards for good work, and this tended to influence their drawing self-efficacy. Actual experience had a powerful effect on drawing self-efficacy and several children said their beliefs had changed between the time of the questionnaire and interviews due to an intervening positive or negative experience. Often these experiences were not directly related to drawing. For example one child felt he could no longer draw well because he went over the lines while he was colouring in, while another said her drawing was better now because she did good handwriting. Another child linked drawing self-efficacy to a wider pattern of experiences, including tripping over while playing a team game. Reading and writing performance was associated with success at drawing, and a positive literacy experience, or general competence in this area, had a positive effect on drawing self-efficacy. Statistical analysis supported a significant interactive effect for year level by gender for links between reading age and drawing self-efficacy, although significant contrasts were not identified. There was no evidence to suggest that positive drawing experiences also raised reading or writing self-efficacy.



Patterns of previous experiences appeared to lead to more stable self-efficacy levels by year four, and one girl with high drawing self-efficacy said she just knew she could draw well. On the other hand one boy felt just as strongly that he could not draw well. Year four boys scored over one standard deviation unit lower than year four girls for drawing self-efficacy mean.

In summary, contrary to the common sense view, not all children draw before they go to school. Furthermore, while one might suppose that drawing experience is the main source of performance attainment information, there were several other important sources. Writing competence and the ability to accurately form letters and numbers was also a key source of performance information. Children also related experiences in seemingly-unrelated fields to their beliefs about drawing ability.

### **Verbal Persuasion**

At both sites children provided the greatest source of verbal persuasion. The teachers were positive at all times, although they tended to praise appropriate behaviour rather than comment on elements of the drawings. Although teachers quickly quelled negative comments amongst children, children often commented specifically on each other's drawings. At times the school children applied criteria used in other curriculum areas and the kindergarten children commented about scribbling. School children also linked comments and insults about writing to drawing ability, and insults about drawings tended to link to intellectual aspects, with descriptors such as 'stupid' or 'dumb'. Positive comments about drawings such as 'pretty' or 'beautiful' tended to reflect qualities favoured by girls.

Children with the highest drawing self-efficacy levels were more likely to give and receive positive verbal messages, while those with the lowest were more likely to exchange negative messages. Confident children told others what to do, how to do it, and when they were making 'mistakes' in their drawings. In general girls commented more positively about each other's drawings than boys did. While this was true of both sites, the contrast was most noted at the kindergarten level. As children often sought same-sex groupings this led to some marked contrasts of verbal exchanges between groups of boys and girls. Also, as verbal persuasion acts as a source of self-efficacy information, same-sex groupings, and groupings of children with similar efficacy levels, reinforced existing efficacy levels.

At the year two level the teacher encouraged the children to comment on each other's drawings, during the drawing process. Findings from the quantitative data suggested that this proved efficacious for the children, and at this level the boys had a higher drawing self-efficacy than the girl's did. This year level was also identified as having the highest preference for drawing activities and emotional responses to drawing.

In summary, despite the belief that teachers are the primary source of verbal feedback in the classroom, children had the dominant role in verbal persuasion. The children developed quite clear criteria by which they judged their own and others' drawings and at times these criteria mirrored criteria from other curriculum areas. The nature of comments tended to reflect self-efficacy levels with children with higher self-efficacy giving and receiving more positive messages than those with low self-efficacy did. The year level where children were encouraged to exchange verbal comments had the highest preference for drawing and positive emotional responses and the boys appeared to respond positively to constructive verbal interaction.

### **Vicarious Experience**

At the kindergarten, the teachers did not model art activities and therefore children provided the greatest source of vicarious experience for each other. The boys in particular appeared happy to draw similar topics and the boy with the highest drawing self-efficacy was proficient at drawing dinosaurs, using a set sequence of lines. Other boys drew dinosaurs also, without the benefit of a set sequence, discussing dinosaur features and images seen at the movies. Dinosaurs were a very popular topic amongst the boys, and the kindergarten had dinosaur toys, posters and books. The children however did not use these resources to help them draw dinosaurs, and the teachers did not suggest that they would be a source of motivation or visual information.

The kindergarten girls were less likely to draw the same topic, and one girl commented that she was good at drawing, but those that copied were not as good. Therefore, although copying was one way to expand upon vicarious experiences, the children were beginning to develop values that discouraged this practice. By year four, copying was discouraged by teachers and children, and those children who did draw images from the media, such as DragonballZ, were not regarded as good at drawing. Statistical data showed a significant interactive effect for gender by year

level with new entrant girls contrasting most with year four boys. Furthermore, there was a significant effect for year level. Younger children reacted more positively to vicarious experiences, believing themselves capable of achieving good outcomes if others did, than older children.

Observations suggested that the grouping of children with low drawing self-efficacy tended to provide further negative experiences. Self-criticism, rubbing out, and general frustration while drawing, tended to impact most negatively on those that doubted their ability to draw well. As modelling is most effective when the two parties share similar personal characteristics, same-sex grouping further heightened the vicarious experience.

The new entrant and year one teachers provided vicarious experience for the children by modelling the drawing process. This generally proved effective in motivating the children, and children did not appear to copy the teacher's image. Rather the visual modelling provided children with an insight into ways of proceeding.

In summary, while teachers at new entrant and year one provided vicarious experience through modelling the drawing process, for most children the greatest source of vicarious experience was from one another. Data showed that as children progressed through the year levels their belief in their ability to draw well if others did declined. However children sought visual information to guide them and images in the media provided a source of modelled drawings, but in general the use of these was discouraged. Groupings of children provided positive or negative vicarious experience, and to a large degree reinforced existing efficacy levels. Therefore positive modelling for all children may have proved effective in raising drawing self-efficacy, especially for those grouped with other children who were also struggling.

### **Physiological State**

In general children with the highest drawing self-efficacy were the most resilient to negative messages and experiences. Similar comments had different effects on children depending on their efficacy levels. Therefore, children with high drawing self-efficacy tended to have a more positive emotional response to drawing., Art activities at the kindergarten were sometimes used to control the undesirable behaviour of a group of boys. Therefore, being controlled or chastised would contribute to a negative emotional state for those boys. As children with lower

drawing self-efficacy were more likely to give and receive negative messages, drawing was not as emotionally rewarding as it would be for those with high efficacy.

Generally the teachers strove to create learning environments that fostered a positive emotional response to art. In general this was achieved and, as the questionnaire revealed, most children enjoyed drawing. However some interactions in the classrooms were subtle, and children were socially isolated, ignored, or criticised by peers. Questionnaire responses showed a significant interactive gender by year level effect for emotional responses to drawing with the greatest contrast between year four boys and girls. There was also a significant contrast for year level between year two and year four children. Furthermore, responses to questionnaire items, that asked children to say how confident they were to draw good pictures on specified topics, showed a general trend towards a decline in drawing confidence as year levels increased.

In general children were inexperienced at receiving positive criticism, and children spoke of being frustrated and embarrassed by critical comments. Positive comment from others appeared to be important to the children and several children aligned patterns of friendship with whom they thought of as good at drawing, and to whom they would show their drawings. Children with high drawing self-efficacy appeared to be much happier when drawing than those with low drawing self-efficacy.

### **7.03 Messages and Gender**

Findings of this research suggested that there were differences between the messages boys and girls gave and received. While these differences were not true of every child and may not reflect a larger population, in general the boys exchanged more negative messages than the girls. The reason for this is not clear, however negative comments amongst boys may have been regarded as more masculine than positive ones. On the other hand, comments about 'beautiful' drawings may have been regarded as more feminine. In our culture where measures of feminine self-worth are strongly linked to visual characteristics, perhaps the language of critiquing visual outcomes, such as drawing, has also taken on feminine overtones.

In some year levels the contrast between the experiences of boys and girls suggested that drawing was a more positive activity for girls. The questionnaire data

supported this impression with a significant gender difference for preference for art activities by girls. There were also significant gender by year level interactive effects for drawing self-efficacy mean (year four boys 1.67 standard deviations units lower than the year four girls), vicarious experiences (greatest contrast between year two girls and year four boys), effort and persistence (greatest contrast between year two and year four), and emotional responses (year four boys 1.25 standard deviations lower than year four girls for the mean).

#### **7.04 Messages and Year Levels**

The messages that children gave and received about drawing were linked to the social structures and interactions in the classroom. Observations and interviews revealed several themes that went across all year levels and some that were unique to the school or kindergarten. The themes are summarised in Appendix L.

Common across both sites were comments and messages about scribbling, links between drawing and literacy skills, and certain topics being more appropriate for boys or girls. While the teachers were consistently positive in both the kindergarten and school, boys tended to exchange more negative comments than the girls. In the kindergarten and year four level, the experiences of drawing and messages amongst boys and girls varied, with girls having more positive experiences. However the kindergarten boys had a higher drawing self-efficacy mean than the girls did. It should be noted when interpreting this finding however that only 40% of the boys responded to the questionnaire and undertook art activities, while 60% of the girls were involved.

While the compulsory nature of the school programme meant that all children drew at school, a higher proportion of girls than boys chose to undertake art activities in the kindergarten. Statistical data showed that overall the kindergarten children showed a lower preference for art activities than any other year level. The presence of a kindergarten teacher tended to encourage mixed sex groups, and art was sometimes used as a control or punishment.

Unique to the school setting was the teacher modelling the drawing process, and the provision of visual models and motivation. At year two level children were encouraged to comment on each other's drawings, which generally proved to be a positive experience as emotional responses were the most positive at this year level,

showing a significant contrast with year four. Children commented that effort, ability and persistence were important for successful drawing, and by year three children spoke of knowing how to draw. Children with high drawing self-efficacy appeared dominant in the social setting of the classroom, up to year three. The year four child with the highest drawing self-efficacy was engrossed in the act of drawing, and was not the most dominant in her social group.

By years three and four the issues of ownership of ideas and copying were strong themes amongst children and the year four teacher, and vicarious experience proved the least efficacious. Although teachers did not talk about right and wrong ways of drawing, or good and bad drawings, the school children made many comments about these aspects. The children developed their own set of criteria by which to judge their own and other's drawings, and children generally showed a decline in drawing confidence as the year levels increased.

### **7.05 Messages and Drawing Self-Efficacy Levels**

In general children with high drawing self-efficacy were more likely to give and receive positive messages about drawing, than those with low self-efficacy. What is more, those with high drawing self-efficacy tended to occupy a dominant role in their social group and expected positive feedback from others. Those that received negative comments also gave them, and at times this appeared to be a defensive mechanism. The main exchange of messages was between children, and not between teachers and children. However, when the teacher did comment, children with high self-efficacy tended to interpret the comments as positive, while those with low self-efficacy would sometimes interpret neutral comments as negative.

### **7.06 Findings, Issues and Implications: Kindergarten**

From the kindergarten observations and interviews, several impressions and implications for teachers emerged. The first major observation was that not all children engaged in art activities at the kindergarten. Contrary to the common sense view, kindergarten children showed the lowest preference for art activities. In relation to this research topic, this has implications in that the assumption is often made that all children naturally and freely draw before they come to school. As the children had free choice of activities it was possible that some children did not do any drawing at



kindergarten. The same may have also been true for drawing at home. Self-efficacy theory suggests a link between self-efficacy and preferences (Bandura, 1986). Therefore those who chose to participate in the research and art activities may have had higher drawing self-efficacy than some children that did not. Therefore, even the child with the lowest self-efficacy score may have been higher on that scale than some of those that did not participate.

Observations showed that the girls were proportionally more highly represented involved in art activities than the boys, and quantitative data showed a statistically significant preference for art activities by girls. The reason for low participation in kindergarten art activities by boys is not clear. However as art activities were usually inside, sedentary activities this may have contributed towards the low numbers of boys engaged in art activities.

When children did undertake art activity, boys and girls exhibited differing patterns of interaction and verbal exchanges. While girls were capable of negative behaviour, they tended to seek associations that supported their activities and provided positive verbal interactions. Many boys on the other hand engaged in physical and verbal interactions that challenged and provoked. While these differences could be attributed, in part, to children exploring and defining their gender roles (Elkind & Weiner, 1978), verbal exchanges did provide a source of self-efficacy information. Therefore, children and teachers would have benefited from models of ways of talking about art works that provided positive and constructive feedback. Research suggests that the dominant practice of a child-centred curriculum, based on developmentally appropriate practice (Gunn, 2000; Lewis, 1998/99), has meant that many teachers have not considered or developed skills in critiquing. In fact, for many it may pose an ethical issue as comment by adults is commonly held to be one of the reasons why children show a decline in drawing confidence. I would suggest however that skilful and sensitive discussions with children would provide children with constructive feedback that could increase their performance attainment. Schirrmacher (1986) suggested that teachers could use a combination of feedback styles that includes discussion about the elements of a child's artwork, for both representational and non-representational images.

Children appear to genuinely enjoy interacting with teachers and the presence of an adult encouraged both boys and girls to be involved in art activities. However in



the absence of an adult, boys tended to associate with boys, and girls with girls. Furthermore the type of interactions between children tended to support same-sex groupings, and when a boy who usually played with a group of boys chose to do an art activity instead, other boys would encourage him to abandon the art activity and return to the larger group. Therefore, overall in the kindergarten group, boys were less likely than girls to undertake art activities, and when boys did participate they were more likely to exchange negative comments. If a boy was not with a group of boys he may have been either isolated from other boys, or be drawn back into the activities of the larger group.

Teachers were positive towards all children, but girls were more likely to seek interaction with them when doing art. Teachers' comments and messages tended to focus on appropriate behaviour rather than aspects of art, and at times boys were asked to undertake art activities to settle undesirable behaviour. This provided a source of negative messages for these children. At the same time several girls recognised that artworks were valued by others and gave them as gifts.

Many children saw drawing and writing numbers and letters as the same. The use of line to represent symbols for people, the sun, grass and the like was paralleled with the use of line to represent symbols such as letters and numbers. From an adult perspective these may be discrete skills, and receive different comment, but my observations suggested that children did not strongly differentiate between drawing and writing at this age. Therefore the messages adults gave about writing correctly may be applied to other forms of drawing and provide verbal feedback which at times would be contradictory. Children and teachers also gave and received messages that linked writing, and by implication drawing, to school readiness. In fact, nearly two thirds of the boys at the kindergarten were not observed undertaking art activity over the three months of the research processes, and if links between drawing and writing are valid, these children may have been at a disadvantage when attending school.

Children often expressed the view that scribbling was bad drawing. As all children develop drawing skills they go through a scribbling stage and it may be inferred that children saw younger children as less competent at drawing. The children with high drawing self-efficacy all had the ability to create representational drawings and the topic of dinosaurs was popular amongst the boys. The kindergarten had dinosaur books, posters and toys and these provided access to visual information.

One teacher-initiated activity involved making dinosaur masks and the boys were well represented in this group. Therefore, the deliberate development of themes, and the provision of motivational resources, may be one way for teachers to encourage greater participation in drawing. The Reggio Emilia approach to early childhood education is one that provides a model of inquiry-based theme development and critical reflection on activity including production of art works. Not only do topics develop over sustained periods of time, but children and adults engage in conversations about art that challenges and explores ways of solving problems. Art works are re-visited and developed, and children are encouraged to represent real objects and events that are important to them (Edwards, Gandini & Forman, 1998; Gandini, 1997; Hendrick, 1997). This approach has many other features including collaboration and the important role of art centres, studios and teachers. It is not within the scope of this chapter to explore these fully, however the Reggio Emilio approach does offer insights into ways of addressing many of the implications and recommendations that this research has identified.

Within a stimulating environment, and with well considered teaching practices, all children may develop higher drawing self-efficacy. The children that had the top scores for drawing self-efficacy in this study displayed several characteristics in common. They were all able to draw representational drawings, displayed an awareness of strategies for learning and solving problems, and received and expected positive comments from friends, family and teachers. When engaged in art activities these children worked for extensive periods of time compared to others, and they also displayed an ability to write numbers and letters. They all experienced positive emotional responses to art and appeared to enjoy art activities.

### **7.07 Findings, Issues and Implications: School**

The themes and impressions that emerged from the school interviews and observations provide opportunity for reflection on the nature of children's experiences. One of the first major impressions was the difference between the kindergarten's and the school's physical and social settings. Although opportunities for outdoor and highly physical activities were readily available to kindergarten children, this was not so at school. Generally speaking boys were less likely to choose inside activities at kindergarten and furthermore many of the inside school activities

available to children, including drawing, were ones that girl's preferred. The free choice activities observed, such as drawing, dough modelling and reading, which had sometimes been used to control undesirable behaviour at the kindergarten, were used at the school as incentives to complete other school work, and as such appeared to motivate the girls more than the boys. These changes in activity and attitudes were likely to effect boys and girls in various ways – for boys the adjustment to school could be especially difficult, while girls could find the school environment supports their preferences. Indeed new entrant girls had an increase in drawing self-efficacy and scored almost one standard deviation above the boys.

Social groupings for self-selected interactions again favoured same-sex groupings, and the social experiences of boys and girls at times contrasted greatly. This was especially true of the new entrant and year four class where the girls collectively had higher drawing self-efficacy. This was supported by quantitative data, which also identified strong contrasts between boys and girls at these year levels. Furthermore those children with high drawing self-efficacy appeared to have more confidence in the social setting of the classroom, and were less likely to attract or give negative messages about drawing. On the other hand the children with lower self-efficacy were subject to negative comments and messages from other children. They appeared less socially dominant, did not appear to enjoy drawing as much as some of the other children, and lacked power and status in the social hierarchy.

Just as the low-efficacy children at kindergarten commented on scribbling, so too did the school children. This was especially true of the new entrant and the year one level where some children might still be operating in the developmental stage of scribbling. Although comments about scribbling were regarded as insults, some younger children called their own drawings scribbles, and by year one children's comments linked scribbling to levels of maturity and poor class work. While teachers were aware of developmental stages, and would be positive about all drawings, research suggested that children do care if their drawings fail to gain recognition from others (Freeman, 1997). Therefore younger children may benefit from open discussion about scribbling as an acceptable art form, and teachers could provide support and teaching for those who wish to develop their representational drawing skills. Furthermore, drawing styles, other than representational, need to be promoted that explore the elements of art. These might include drawings that are based on

design and pattern, texture, lines or shapes, Maori and Pacific patterns, or other themes that do not rely on creating images based on representing known forms.

Observations at the kindergarten suggested that drawing ability and writing ability were regarded as one area of accomplishment to children of this age. Drawing and writing are both forms of sign systems and this theme continued to develop amongst the school children with some of the younger children referring to writing as a form of drawing. Young children, with high drawing self-efficacy, often expressed confidence in their ability to draw, read and write. As the children matured the links were still made but the areas were more discrete. Some children linked success or failure in producing neat handwriting to positive or negative comments about drawing. Derogatory comments about reading or writing were used as insults during drawing sessions and some children believed that those that could not write well could not draw well.

Many comments and messages were shared amongst children about the right and wrong way to draw. This has several implications for drawing self-efficacy development and classroom practices. Firstly, while the teachers did not comment about right and wrong ways of drawing, the children appeared to want some guidelines by which to measure success, and indeed constructed their own collective criteria. Most other areas in the curriculum had clearly defined measures of success, and children created their own set of drawing criteria based on aspects such as size, content, neatness, drawing things the proper way, and avoiding mistakes. These criteria may be influenced by external standards applied to drawings, and criteria transferred from other curriculum areas such as handwriting. One of the older children, with high drawing self-efficacy, actively sought and gave constructive criticism. The year two level had the strongest evidence of teacher and peer critiquing of drawing and at this year level the emotional response to drawing was the most positive. Also, contrary to other trends, at this year level the boys performed 0.73 standard deviations above the girls' mean. With that in mind it may have been preferable for all teachers, as Gardner (1982) suggested, to enter into discussions with children about the various ways that drawings and art works can be valued rather than leaving this open. In this way critiquing could not only be a useful skill for children, but teachers could focus comment on the elements of art. For some teachers this may require development of their own art knowledge and critiquing skills first.

In general, children enjoyed the drawing sessions and the questionnaire revealed positive emotional responses for most groups. However observations showed that when children were critical of each other's drawings, those subjected to criticism appeared unhappy about the attention. Also at times the teacher's neutral comments, if directed at a child with low self-efficacy were re-interpreted as negative comments. Therefore, while critiquing can be a useful tool, it can also leave the recipient feeling unhappy. Younger children looked uncomfortable when others said they had made mistakes, while older children said they felt embarrassed and wanted to give up. All of the observed situations were in response to child generated criticism, rather than from a teacher. When a teacher did comment, children were very responsive to the tone of the comment, and reacted positively to positive comments, and avoided situations that could lead to negative feedback. For the most part, however comments about drawing ability and outcomes came from children and were both critical and praising.

Emotional responses to art were also at times linked to patterns of friendship, where children praised others for their drawings because they were friends and avoided comments from others, for fear of criticism. Children cared about how they were judged and identified those that they believed would provide a positive emotional experience and response, and avoided those that threatened their emotional wellbeing. Therefore, as teachers, we need to consider the social structure in the classroom, so children can support one another. However, at the same time, observations revealed that children with similar efficacy levels often worked together, and for some groups this provided vicarious experiences of low enjoyment and success. To be effective in promoting a positive learning environment the social groupings needs to be more than a grouping of friends – teachers need to be aware of social situations that heighten problems, and help children to communicate positively. An understanding of children's self-efficacy levels, and the sources of self-efficacy information, would help teachers to make informed choices about social groupings.

Although children were not grouped or graded for their drawing ability the children had no hesitation in nominating those they thought of as good or bad at drawing. Sometimes, especially in the younger age groups, these judgements were linked to features such as scribbling or ability to draw numbers and letters. Some older children measured success by tangible awards and prizes, such as stickers,



principal awards and prizes at shows. Often the children had no specific idea why their work was rewarded, just that it was “good” or “quality” work.

Children also judged their own ability on the comments of other children. Those with the lowest drawing self-efficacy were subject to comments such as being told their drawings were stupid or dumb. These children expected and received criticism from other children. One child didn’t like to show his drawing to others because he believed they would say “Yours sucks.” On the other hand three new entrant girls expected others to say their drawings were pretty, beautiful, or cool.

Messages about drawing were sometimes linked to other aspects of a child’s current or earlier experiences. While drawing self-efficacy may be specific to drawing, comments by some children suggested that efficacy levels reflected a wider pattern of experiences and self-concepts. One child, for example, linked criticism about his drawings to tripping over while playing softball. Another recalled unpleasant laughter and comments by children, from two years previous, which impacted on his present drawing confidence.

Children made comments about the strategies that they used to solve problems or to draw successfully. The new entrant to year two children considered successful drawing to be the result of effort and practice. An emphasis on effort rather than ability ran through all the levels but, by year four, one child with high drawing self-efficacy suggested that children lacked confidence because they *think* they cannot draw something right, but at the same time effort would overcome this problem. The cognitive aspect of drawing was more apparent in comments by year three and four children who spoke of *knowing how to* draw. Some children with low self-efficacy said they didn’t know how to draw, suggesting that they felt they lacked the knowledge and ability to solve drawing problems. Children such as these may be empowered by specific teaching to help identify the problems, and some of the ways to go about solving them. The strategic teaching of skills could enhance creative capacities, as it is difficult for any artist to express ideas effectively while still trying to understand the techniques, media or processes. It is also important for teachers to make children aware that there are a multitude of ways to use media and express ideas and the models they are given are just one way of working. Teachers need to provide a variety of models and ways of working so that children develop “the ability to recognize and accept multiple perspectives and resolutions” (Eisner, 1999, p. 157).

Associated with concepts of effort was the belief that persistence would lead to success. Results from the questionnaire showed that there was a significant interactive effect for gender by year level for effort and persistence, with the greatest contrast at year two and four. New entrant children had the highest overall mean, and year four had the lowest. Observations showed that, in many cases, when children had problems drawing they rubbed out the drawing or turned the page over without identifying the specific problem. For many they struck the same problem with second and subsequent attempts, leading to frustration and outcomes that they were not pleased with. For continued effort to lead to success, the effort must make it possible to succeed. Therefore if children were having problems, they needed to be able to identify the problem so that effort could be applied to the solution.

Modelling is most effective in raising self-efficacy for those who judge themselves capable of the task (Bandura, 1986), and in general most children benefited from the teacher modelling the activities, especially the children with high drawing self-efficacy. However a few low self-efficacy children still had trouble understanding the nature of the task. For these children peer support may have proved more efficacious as modelling is most effective when learners and models have similar personal characteristics (Bandura, 1986). But the role of children in providing peer modelling was not deliberately encouraged, except partially at year two where children were asked during the session to walk around and look at others' drawings. Comments were positive amongst this group and they had the highest drawing self-efficacy mean, and positive emotional responses. In the higher year levels children were discouraged from helping one another or sharing successful strategies or ideas, and ownership of ideas and images was an issue. In our culture "a child who copies another child's drawing [is] seen to be much like the child who takes another's possession" (Wilson & Wilson, 1982, p. 63).

Children who had a reputation for drawing a specific topic were often at an advantage, as others were discouraged from drawing in a similar style, or copying. Children who had favourite topics often used a set sequence of lines and shapes to create their image, and this contributed towards their reputations as good drawers. One child used a rhyme, taught to her by an older cousin, to help her remember the sequence of lines used to draw a dog. While being proficient at drawing a topic raised drawing self-efficacy, not all topics were readily accepted in the classroom. For



example several boys liked drawing the television characters from DragonballZ, and another liked to draw “killing drawings.” Both these topics had action as a central theme, and could be related to images seen in the media (Wilson & Wilson, 1982). However while the media images were a source of drawing enjoyment for these children, they were also regarded as a form of copying, or as unacceptable in the classroom, and were not encouraged in the classroom programme. Perhaps as teachers we should consider the cultural influence of the media, and the value children place on being able to replicate and expand upon these images, as these topics could provide a starting point for inquiry based learning. Wilson and Wilson (1982) argued for acknowledging cultural influences on drawing, and the rich source of media images. They suggested that the fear of children being fixed on a single image or way of drawing could be countered by presenting a variety of models and ways of working. Copying does allow for some artistic development and enjoyment, and Wilson & Wilson (1982) advocated the provision and collection of a wide variety of images from magazines, comics, books, paintings, and photographs. This research also suggests that images from film, video, the Internet and television could be added to this list. These images could provide starting points for further drawing development, and be part of a varied and innovative visual arts programme, that promotes positive drawing self-efficacy. Again the notion of developing a theme or topic that the children became fully involved in could provide the motivation for art works based around a theme or inquiry. While integrated programmes often involve several curriculum areas teachers need to be aware that the arts are often relegated to the fringes of such units. Harste (2001) argues for acknowledging the arts as part of language based inquiry. Harste cautions that “by making art, music, drama, and movement second-class citizens in curriculum, we limit our ways of knowing, too. Whole dimensions of what it means to know are silenced” (p. 5).

Overall the teachers made very positive comments to children, and interactions were supportive and sincere. Each teacher had their own teaching style, but all used comments and questions to extend children’s thinking, help them solve problems, and to provide direction and motivation. In the new entrant and year one classes, teachers also drew images that helped the children to visually understand the thinking and drawing processes. For some children, watching their teacher draw and receiving positive comments from them had a powerful effect on their drawing self-efficacy.

One child Rachel, for example, recalled watching her teacher draw a dog. Rachel then developed her own images, based on the observed process of connecting shapes and lines, and received praise from the teacher. This was a defining moment in her drawing confidence and reputation, as she continued to draw dogs over the next three years. However, while this had had a positive effect on Rachel's drawing self-efficacy, she had perfected a formula for drawing dogs that she seldom deviated from. Skilful teaching, and collaborative classroom environments, could encourage Rachel to share her skills with others, and to develop her drawing style further.

Teachers talked to their classes about ways of working and helped children to develop drawing strategies based on observation. They usually responded to an individual child's drawing when they were presented with it, or when the child asked for assistance. Therefore, those children that felt confident enough to seek advice were likely to believe that such advice could be acted upon, and have higher drawing self-efficacy. It is possible that those children who were most in need of support were the least likely to seek it. Although at no stage during observations teachers gave negative comments, children who had the lowest drawing self-efficacy were more sensitive to negative comment, and would avoid situations that might invite such comment. For example, Andrew, a year four boy with low drawing self-efficacy, said the teacher could help him to be more confident if they said, "That looks good" when looking at his drawing, even if it didn't. Specific comment that could lead to specific action would have been most helpful to Andrew, and he recalled being told by a teacher once to put more 'impact' in his drawing – a word he understood, but a concept he did not know how to apply. Andrew had low drawing self-efficacy but was prolific in drawing DragonballZ action figures, and as noted earlier, this could have provided a starting point for developing his drawing self-efficacy and other drawing skills.

Generally teachers provided motivation and strategies at the start of the drawing session, and during the session provided general positive comments to keep the children on task and to help them solve common problems. In one class the teacher initiated comments about elements of the children's drawings while they were working, by holding up and discussing children drawings, and by inviting children to comment on each other's drawings. This was the closest any teacher came to critiquing the drawings. As the teacher talked about and illustrated points by using the

children's drawings this provided, to a small extent, a source of child based modelling. In this room the class mean for drawing self-efficacy was the highest in the sample, and this could suggest that critiquing motivated rather than stifled drawing outcomes, leading to higher performance attainment. This room also had the lowest observed incidence of negative comments amongst children.

Although all teachers modelled positive reactions to children's drawings, and discouraged negative comments amongst children, a network of comments, social behaviours and reactions existed amongst the children that the teachers were not fully aware of. This research provided an insight into interactions amongst children that is often hidden from teachers and mediated by their presence. It is important to realise that while the common sense view holds that the teacher is the most powerful influence on children's self-efficacy, the constant source of comments and messages amongst children must be acknowledged and considered as a primary source of self-efficacy information.

Consideration of the findings provides insights into the mechanisms that mediate children's experiences of drawing and the role of messages in developing drawing self-efficacy. An understanding of children's experiences and views informs practice and curriculum development. In the next chapter the implications and recommendations from this study will be discussed.

## CHAPTER EIGHT

### CONCLUSION

#### 8.01 Introduction

In light of the findings and discussion this chapter considers key implications for teachers in terms of instructional practices in schools and kindergartens. This is followed by recommendations that span both educational settings. The chapter concludes with a look at the strengths and limitations of this study and the implications for further research.

This study was in part motivated by the commonly held belief that early experiences are highly influential on drawing self-efficacy. Underlying this belief was the assumption that children are strongly influenced by the comments and messages of teachers. Findings have shown that comments and messages did influence drawing self-efficacy, but the most prevalent exchange of messages was between children. While the kindergarten and school had different organisational structures, findings suggested some implications for instructional practices that could span both settings. The recommendations given are based on intuitive responses to the described situations, research, literature reviews and professional opinions. However I invite the reader to also engage with the data and descriptive excerpts in the results chapters, and consider their own interpretation of implications and recommendations.

#### 8.02 Implications

The four main sources of self-efficacy information; performance attainment, verbal persuasion, vicarious experience and physiological state (Bandura, 1986), provide a framework with which to consider key implications. Performance attainment is highly influential on self-efficacy. At the kindergarten level some children chose not to draw or undertake art activities, so lack of experience could impact on future success and drawing self-efficacy levels. This would appear to be an issue of particular relevance to boys. For those children who did draw it was important for the development of positive drawing self-efficacy that they enjoyed some level of success. However, while both sites provided opportunity for drawing

and art activity, in most cases the children received little guidance once the drawing activity was undertaken. As noted in the findings, children often reacted to problems by giving up, or starting their drawing again, without identifying the issue causing concern. This may be typical of the practice in many similar classrooms and there is an opportunity for teachers to help children understand the nature of the problems they encounter, and some of the ways they may solve them. Also, access to visual information including observing and touching actual objects, would assist children in understanding how shapes and lines make up a whole and would encourage visual enquires. For example a child who is frustrated while trying to draw a flower could be invited to look at flowers in the garden, to pick a flower and have a look at how the petals are shaped and fit together. Children who have an interest in drawing action figures could invite another child to model for them, so that they can look at and draw a person in various poses. These children could also look at photographs and images created by other artists and see how these artists have explored and interpreted the topic. These interventions are likely to encourage problem-solving strategies and have a positive influence on performance attainment.

Children provide the greatest source of verbal persuasion, and often applied criteria developed from information outside of the classroom, or criteria used in other curriculum areas, to judge their own and other's drawings. Messages about writing and reading were most often applied to drawing across all year levels. Therefore teachers need to be aware of the way that comments given about other aspects of children's performance can impact on messages about drawing. To counter this teachers and children could engage in discussion that helps children to critique their own drawings. At the same time teachers and children need to be aware that art works are valued in a variety of ways and that there is no one way to regard art works. Teachers who are skilled at discussing the elements of art, such as line, shape, form, colour, size, texture, pattern, mass or volume, use of space and balance can provide starting points for children to discuss their drawings.

Children often draw in the presence of others, and teachers and children were sources of vicarious experiences. Very little modelling by teachers was observed in the kindergarten, and this may have reflected a philosophy that promoted natural development of drawing skills, rather than nurtured development. However the drawing success and frustration of others influenced children. In the school setting

self-selected groupings often led to groups of children with similar drawing self-efficacy levels. For the children with high self-efficacy this provided positive vicarious experience, but for the children with low efficacy it heightened their frustration.

In general, while vicarious experience is an important source of self-efficacy information, and modelling is recognised as one way to convey information about ways of working, children were not encouraged to help each other. In fact the issue of ownership of ideas and copying was a source of debate and criticism, especially amongst older children. As educators we need to examine the tension between originality and creativity on one hand, and learning from visual images on the other. The practice of inquiry about visual images and exploring and imitating the artworks of other people and cultures is basic to the history of art development over the years. However we often expect young children to develop creative and innovative ideas without exploring the artworks of others. In the classroom the artworks most accessible to children is that of other children, book illustrations, and the visual images that are an integral part of living in a world of film, television and computers. Furthermore, this research found that images in the media provided a source of modelled drawings, but in general these images were not valued in the classroom programme. Therefore, as teachers we need to consider the role these images have in the visual cultural capital of our children, and our acceptance of these as valid art forms.

The fourth source of efficacy information, physiological state, is associated with the emotional responses that children have to drawing and art. In general the children in the sample experienced positive emotional responses to drawing, but some children were vulnerable to criticism and failure. At times the teachers were unaware of the way in which children received negative comments or suffered frustration while drawing. Some children with low drawing self-efficacy suggested that the teachers needed to be especially nice about their drawings, even if they didn't like the drawing. Using this approach as the only source of feedback would conflict with the earlier suggestion for constructive comment, but does remind us that all comments must be tempered with an understanding of each child's emotional wellbeing. One way to understand how children are likely to respond to comments is to understand the drawing self-efficacy levels of the children, as those with low self-efficacy are



likely to be less resilient to failure or criticism than those with high self-efficacy (Bandura, 1986).

Teachers need to also be aware of the nature of social interactions and comments, and monitor the levels of frustration and negative feedback. At times children need to be given the opportunity to explore topics that excite them, and teachers need to consider and build on the enjoyment some children get from drawing media characters. Furthermore some children indicated that they would have benefited from re-visiting art activities, as they felt embarrassed by their work that was on display. While display of art works is generally regarded as a form of valuing children's art, perhaps children would benefit at times from greater input into decisions about what is to be displayed.

The research has generated a wealth of information about children's drawing self-efficacy and the messages they gave and received. The findings have provided opportunity for discussion of some of the issues and implications for teachers, and the following section outlines a few recommendations that may lead to enhancing children's drawing experiences in an educational setting and raising children's drawing self-efficacy.

### **8.03 Recommendations**

The following recommendations are made in light of the research experience, and the issues and implications that have been identified. Recommendations include a focus on participation, critiquing, theme and inquiry-based programmes, children teaching children, teacher professional development, and understanding drawing self-efficacy levels of children.

#### **Encouraging Full Participation**

All children would benefit from positive experiences in drawing and art activity, and consideration needs to be given to how to make art activities more attractive to all children. In some settings this may have special implications for boys. Participation in art activities might be fostered with younger children if some art activities are strategically placed to allow for greater physical activity, or inclusion of art activities that involve large motor skills. Activities that involve fine and large motor skills could include finger painting on large surfaces, papier mâché models, clay work, box construction, model making, or environmental art such as sand



sculptures and driftwood structures. Furthermore art activities may be more attractive if they are not used as a means to control or punish inappropriate behaviour.

Observations in both sites suggested that involvement and enjoyment might increase with greater teacher involvement and positive feedback during art making processes. In the kindergarten setting the children initiated the topic of their drawings but there is a place for the provision of visual and real resources to motivate, stimulate and provide visual information. In the school setting teachers could consider the development of activities based on themes or issues popular with, or initiated by the children, to encourage full and active participation.

### **Theme and Inquiry-Based Programmes**

"Students learn best through deep engagement in activities with medium levels of complexity that reflect life experiences and provoke several levels of thought" (Freedman, 1997, p. 101). Therefore programmes that allow children to develop visual understandings and expressions through a variety of related experiences are likely to increase drawing self-efficacy. Reggio Emilia approaches also advocate developing child and teacher selected themes of interest and inquiry as the basis of sustained theme-based programmes (see Edwards et al., 1998; Gandini 1997, Hendrick, 1997). I believe that art programmes based around themes can facilitate increased self-efficacy if the programme allows for the development of ideas and images over a sustained period of time. Furthermore topics, themes and enquiries should be of interest to the children and allow theme to explore a variety of art forms and visual information. At the same time the programme should allow for the teaching and development of the skills necessary for the children to successfully manipulate media, processes and techniques.

Theme and inquiry based programmes should not limit ways of expressing, but encourage children to develop ideas and communicate thinking through a variety of sign systems such as art, music, movement, drama, language and mathematics. To encourage deep engagement and to reflect the complexity of life experiences art programmes need to involve children, teachers and the wider community in collaborative processes so that children are exposed to a variety of ideas, audiences and fellow artists.

### **Critiquing as a Tool**

As children judged and discussed their own and others' artworks without access to

established language or discussion on drawing they developed their own discourses about right and wrong, good and bad drawing. Therefore children and teachers would benefit from developing critiquing skills. Deliberate discussion regarding drawing and elements of their own and other's artworks would benefit the children in a number of ways. Firstly, discussion and critiquing would empower the children to talk about their drawings in a way that would help demystify the drawing process. Furthermore dialogue about art works could provide discussion about strategies for problem solving and encourage children to talk about their drawings and find merit in their work. Discussion about their own and others' art will help children to explore rather than foreclose possibilities (Gardner, 1982), and help children to understand how other artists and cultures represent their world in visual images.

Critiquing of drawing and art works by the children and teachers provides a form of formative assessment. Children and teachers can replace praise with encouragement and replace a focus on rewards with one on achievements. Clarke (2001) also advocates explicit focus on achievement to raise children's self-esteem and facilitate effective formative assessment practices across all curriculum areas. As this research has shown, children are often unaware of the reason for praise or rewards and therefore such feedback has limited potential in empowering the children to future success. For example one year two child received a compliment from the teacher and said to her peers "I don't know why I'm a good drawer. I just am."

Discussion with children about their art requires some understanding and perception of children's art and art making processes. Schirmacher (1986) suggests an approach for talking to young children about their art and Engel (1995) suggests two processes of observing individual children's art in depth.

### **Teacher Professional Development**

Teachers need greater access to professional development to increase their own confidence in, and understanding of, art making processes and to explore and understand the elements and principles of the visual arts. They also need a good understanding of the developmental stages of drawing to assist them in developing appropriate skills in facilitating discussion with and amongst children about their art. Furthermore many teachers need to have personal experience in art making so that they understand the demands of the task and how these might be modelled so that children can understand them.

### **Children Teaching Children**

Modelling is most effective where participants share similar personal characteristics (Bandura, 1986). Therefore teachers should encourage children to support one another in the art making processes by children modelling activities and sharing ideas with each other. Children should be encouraged to talk about their art and assist others to solve visual problems.

It is important in doing this that teachers provide a variety of opportunities for various children to become 'experts' amongst their peers. Therefore, teachers need to know each child's strength in art and provide opportunities for them to develop and share these. One must also be aware of the interactions amongst children, and their emotional responses to giving and receiving help from others – issues of ownership of ideas and copying need to be addressed so that children are comfortable with sharing ideas. Also children must then be provided with the opportunity to develop the ideas gained from others into a form that they feel is unique to them.

### **Understanding Drawing Self-Efficacy**

This and other research in the field of self-concept and self-efficacy have highlighted the extent to which self-concepts can influence a child's experience of school and learning. Understanding children's drawing self-efficacy would help teachers to provide experiences that build on positive beliefs, and limit experiences and messages that have negative influences. Understanding each child's self-efficacy levels would heighten awareness of those vulnerable to failure and negative feedback. Teachers could increase their awareness of drawing self-efficacy by reading and reflecting on educational research on self-concepts and self-efficacy and observing children while drawing. They could use a questionnaire to gauge drawing self-efficacy and talk to children about their interpretations of experiences. Teachers can increase therefore awareness of self-efficacy by observing children and social interactions in other classrooms and relating characteristics of high and low self-efficacy to that observed, and by sharing these insights with colleagues.

## **8.04 Strengths and Limitations of this Study**

This research makes a unique contribution to the growing body of research on self-efficacy and self-concepts, in terms of both the visual arts and research with young children. This study provides insights into the research experience of working

with young children, using quantitative and qualitative methods, and has involved the development of a statistical tool, in the form of a questionnaire, to gauge drawing self-efficacy levels. This research also begins to address the need for educational research based on the visual arts, with an emphasis on the young artist. It also provides an insight into children's drawing experiences from their own point of view. This research begins to explore the myths and reality behind commonly held views on art experience of young children, and our role as educators.

This research has investigated self-efficacy in terms of the context of drawing. However, at times, findings suggest that more generalised self concepts have influenced the efficacy judgements. Further investigation of the relationship between self-esteem, self-concepts and self-efficacy would have been appropriate. Furthermore, investigations of messages about drawing from outside of the school setting would add depth to an understanding of the messages that provide sources of self-efficacy information.

This research project as an original piece of research offers new insights for educators and researchers. However, like a newly sculptured artwork it has rough edges and surfaces that are yet to be polished and reshaped. Like any artwork, the original piece has value as a seminal piece, as a source of inspiration, and it provides the artist with the impetus for further development and realisation of ideas and concepts. This research model would also benefit from application to other settings, and the refining of research tools.

## **8.05 Implications for Further Research**

This study has provided a starting point for further enquires into the art experiences and drawing self-efficacy levels of children. The findings suggest avenues of enquiry that are worthwhile pursuing and the following suggestions represent a range of research options.

1. The replication of this research in a similar setting, with four to nine-year-old children would be worthwhile so that the findings can be applied to a greater population. In doing so statistical data may become more reliable and qualitative findings more informative and predictive.
2. Replication of this research could be undertaken with older children, building on from year four to year eight. This would provide a picture of the

art experiences and drawing self-efficacy of a group of children across the primary school years.

3. A quantitative study of a larger group, using the questionnaire, could look at drawing self-efficacy levels and trends over a significant group of New Zealand children. To undertake such a project, refinement and piloting of the questionnaire may be needed. For example, as noted in Chapter Three, page 43, children found the questionnaire section on locus of control the most confusing. In light of the fact that locus of control is not concerned with perceived capability (see Chapter Two, page 13), this might be omitted from subsequent questions.

4. A longitudinal study could investigate and document individual children's drawing self-efficacy levels and drawing experiences over a sustained period, and consider influences on drawing self-efficacy from outside of the school setting such as family, media and social groups.

5. While this research project did not investigate the link between drawing self-efficacy and drawing competencies, such a study could be undertaken. Research of this nature would require judgements about drawing achievements. Discussion in this thesis in Chapter Two, pages 14 -15, briefly outlines the approach used by the New Zealand Ministry of Education as part of the 1999 Art National Monitoring project to critically assess artworks. This approach, or the benchmarks provided in these findings, may be useful in developing a research method that investigates the links between drawing self-efficacy and drawing outcomes.

6. The implementation of the recommendations in this study provides opportunity to investigate the impact implementation of these recommendations has on drawing self-efficacy and experiences. Teachers could also undertake this research as an action research project. On a larger scale, research could investigate drawing self-efficacy levels and drawing experiences of a group of children before implementation of the recommendations, during implementation, and over a period of time.

7. Findings from this research suggest that children perceive a link between literacy levels and drawing self-efficacy. Research could specifically target this aspect and investigate the source of children's beliefs and the

implications this has for reading, writing and drawing practices in educational settings.

## **8.06 Concluding Comments**

I have been involved in the world of art as long as I can remember – as a child, student, teacher, advisor, lecturer and artist. As such I have a wealth of personal experiences and shared experiences with teachers and children. As an art advisor and lecturer I am regarded by some as an ‘expert’ in my field, but this research project showed me how little we all really know and understand about children’s experiences. This research has opened my eyes to the world of a group of children and has led me to challenge some of my own views and beliefs. It has taught me about the complex social networks that children develop and how, as teachers and adults, we are unaware of some of the issues and experiences that impact on children’s self-efficacy.

This research project has been a journey of discovery that has changed the way I think and teach. I hope that in sharing this research with others they too may connect with the experiences of these children and relate it to their own classrooms. I hope that in sharing the children’s experiences and views, and in discussing relevant literature and research, others may become motivated to develop learning environments that optimise conditions for developing positive drawing self-efficacy. Lastly I hope that this research will inspire others to investigate and share art-based research and research on self-efficacy.



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## **Appendix A**

### **Information Sheet**

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

#### **INFORMATION SHEET**

**1.** My name is Rosemary Richards. I am presently a lecturer in Art Education and Technology at Massey University College of Education, Ruawharo Centre, Napier. I have been an Advisor to schools in art education, and have been a teacher and art specialist. I have a strong interest in children and their expression through the Visual Arts.

**2.** The researcher and supervisors may be contacted by the following addresses and phone numbers:

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#### **3. The nature and purpose of the study**

This study will fulfil in part, requirements for a Master of Education. Dr Judith Loveridge and Dr James Chapman of Massey University College of Education supervise this study. It is hoped that this study will make a positive contribution to children's sense of well being when involved in art. This study will look at some of the factors that lead children to belief they will be good at art.

#### **4. What will be asked of the children involved**

The children will be invited to answer a set of written or spoken questions about their beliefs in their ability to draw. At a later stage some children will be interviewed to gain more of their views. Several children will be observed when drawing. At each stage specific consent from the participant will be obtained before any research activity is undertaken. At any stage a child can refuse to take part or answer a question.

### **5. Privacy (anonymity and confidentiality)**

All information gathered in the research will be held in confidence. Children's individual responses will be kept confidential. Descriptions and data will not be able to be linked to specific children. However, due to the size of the sample group anonymity and confidentiality cannot be absolutely guaranteed.

### **6. Nature of involvement**

In the first phase of the study the children involved in the research will be asked to spend ten to twenty minutes answering questions about their art experiences and beliefs. In stage two some children will be invited to answer some interview questions regarding their experiences in art. In the third stage two children in each class will be observed whilst drawing. All children will have access to the art materials at the art table in the kindergarten or the art sessions in the school.

### **7. Sharing and storage of information**

Children involved in interviews and observations will have the findings shared with them and they will have the opportunity to clarify any part of the interpretation. Any information given will be confidential to the research and any publications resulting from it.

With the child's permission the interviews may be audio recorded and then summarised. These tapes will be code-named to protect the child's identity. Tapes will not be transcribed and they will be destroyed at the conclusion of this project. With participant's permission questionnaires will be stored in a research archive.

### **8. If a child takes part in this study, they have the right**

- To refuse to answer any particular questions in the interview or questionnaire;
- To withdraw from the study at any time;
- To ask any questions about the study at any time during participation;
- To provide information on the understanding that their name will not be used unless they give permission to the researcher;
- To a summary of the findings of the study when it is concluded.

**Appendix B**  
**Consent Form for Participating Children: Questionnaire**

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

***CONSENT FORM FOR PARTICIPATING CHILDREN: Questionnaire***

*I have had the details of the study explained to me and I understand I may be asked some questions about my drawings. I can ask any questions I want at any time.*

*I do not have to join in the all activities and I do not have to answer all the questions if I don't want to.*

*I understand my name will not be used and that I will not be identified in any way. This information will be used only for this research project.*

*I am happy for my questionnaire to be stored in a safe place at the end of the project.*

*I agree to participate in this study under the conditions set out in the Information Sheet.*

*Child's Name (please print)*

*Child's Signature:*

*Parent/ Caregiver's Name:*

*Date*

## Appendix C

### Consent Form for Participating Children: Interview

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

#### **CONSENT FORM FOR PARTICIPATING CHILDREN: interview**

*I have had the details of the study explained to me and I understand I may be asked some questions about my drawings. I can ask any questions I want at any time.*

*I do not have to join in the all activities and I do not have to answer all the questions if I don't want to.*

*I understand my name will not be used and that I will not be identified in any way. This information will be used only for this research project.*

*I agree to the interview being recorded on a tape though I can ask for the tape to be stopped at any time during the interview. I understand the tapes will be destroyed at the end of the project.*

*I agree to participate in this study under the conditions set out in the Information Sheet.*

*Child's Name (please print)*

*Child's Signature:*

*Parent/ Caregiver's Name:*

*Date*

## Appendix D

### Consent Form for Participating Children: Observations

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

#### **CONSENT FORM FOR PARTICIPATING CHILDREN: observations**

*I have had the details of the study explained to me and I understand I may be watched while drawing and asked to talk about my experiences. I can ask any questions I want at any time.*

*I do not have to join in the all activities and I do not have to answer all the questions if I don't want to.*

*I understand my name will not be used and that I will not be identified in any way. This information will be used only for this research project.*

*I agree to allow the art session to be recorded on a tape though I can ask for the tape to be stopped at any time during the session. I understand the tapes will be destroyed at the end of the project.*

*I agree to participate in this study under the conditions set out in the Information Sheet.*

*Child's Name (please print)*

*Child's Signature:*

*Parent/ Caregiver's Name:*

*Date*

**Appendix E**  
**Consent Form for Parents**

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

**CONSENT FORM FOR PARENTS**

*I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.*

*I understand that my child has the right to withdraw from the study at any time and to decline to answer any particular questions.*

*I understand my child may agree to provide information to the researcher on the understanding that their name will not be used and that they will not be identified in any way. This information will be used only for this research and publications arising from this research project.*

*I agree to the interview being audiotaped though my child has the right to ask for the recording to be stopped at any time during the interview. I understand the tapes may be transcribed and will be destroyed at the conclusion of the project and with their permission questionnaires will be stored in a research archive.*

*I agree to allow my child to participate in this study under the conditions set out in the Information Sheet.*

*Child's Name:*

*Parent/ Caregiver's Name/s:*

*Signed:*

*Date:*

## Appendix F

### Consent Form for Participating Staff

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

#### **CONSENT FORM FOR PARTICIPATING STAFF**

*I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.*

*I understand that children have the right to withdraw from the study at any time and to decline to answer any particular questions. The researcher will endeavour to create a minimum of disruption to the school programme.*

*I understand children may agree to provide information to the researcher on the understanding that their name or that of their teachers will not be used and that they will not be identified in any way. This information will be used only for this research and publications arising from this research project.*

*I agree to allow this study to be undertaken in my classroom under the conditions set out in the Information Sheet.*

*Teacher's Name:*

*Signed:*

*Date:*



**Appendix G**  
**Consent Form for Board of Trustees**

Self-efficacy in art and the messages 4-9 year olds give and receive about their drawing

**CONSENT FORM FOR BOARD OF TRUSTEES**

*I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.*

*I understand that children have the right to withdraw from the study at any time and to decline to answer any particular questions. The researcher will endeavour to create a minimum of disruption to the school programme.*

*I understand children may agree to provide information to the researcher on the understanding that their name or that of their teachers will not be used and that they will not be identified in any way. This information will be used only for this research and publications arising from this research project.*

*I agree to allow this study to be undertaken in our school under the conditions set out in the Information Sheet.*

*Board of Trustees representative's Name:*

*Signed:*

*Date:*



<i>B: Preferences</i>				
9. Would you like to do art at school-	Never	A few times a year	Every week	Every day.
10. Would you like to do art at home-	Never	A few times a year	Every week	Every day.
11. Would you rather play a game or draw a picture?	Game		Draw	
12. Would you rather paint a picture or read and look at a book?	Paint a picture		Book	
13. Would you rather make something with card and scissors and glue or watch television?	Make something		TV	
14. Would you rather tell or write a story or draw about the story?	Tell or write a story		Draw about the story	

<i>C: Vicarious experiences</i>			
15. Do you want to draw when you see other children drawing?	Yes	All the time	Sometimes
	No	Not usually	Never
16. When the teacher sets up the art table or shows the class a new drawing activity do you think you will have some trouble drawing a good picture?	Yes	All the time	Sometimes
	No	Not usually	Never
17. When you see other children draw well do you think you will be good at it too?	Yes	All the time	Sometimes
	No	Not usually	Never

<i>D: Emotional responses</i>			
18. Are you sad or happy when you draw?	Happy	Very happy	A little happy
	Sad	A little sad	Very sad
19. Do you feel happy when other children want to see your drawings?	Yes	Very happy	A little happy
	No	Don't like it much	Really don't like it
20. Do you feel unhappy when the teacher wants to put your drawings on the wall, or your Mum or Dad put your drawing on the fridge or wall?	Yes	Very unhappy	A little unhappy
	No	I quite like my drawings on the wall	I really like my drawings on the wall

<i>E: Effort and persistence</i>			
21. Do you find it easy or hard to draw well?	Easy	All of the time	Some of the time
	Hard	Some of the time	All of the time
22. Do you find it hard to draw new things you haven't tried before?	Yes	All the time	Sometimes
	No	Not very often	Never
23. If you have a problem drawing something do you give up and do something else instead?	Yes	All the time	Sometimes
	No	Not very often	Never
24. If you have trouble with your drawing do you throw it away and start your drawing again?	Yes	All the time	Sometimes
	No	Not very often	Never
25. If you have trouble with your drawing do you just keep working on it?	Yes	All the time	Sometimes
	No	Not very often	Never

<i>F: Strategies for drawing</i>			
26. When you cannot draw something do you ask a friend or another child to draw it for you?	Yes	All the time	Sometimes
	No	Not very often	Never
27. When you cannot draw something do you ask an adult, like your teacher or Mum or Dad for help?	Yes	All the time	Sometimes
	No	Not very often	Never
28. When you have a problem drawing something do you watch how someone else does it so you can draw it better?	Yes	All the time	Sometimes
	No	Not very often	Never
29. When you cannot draw something do you think of other ways to draw it?	Yes	All the time	Sometimes
	No	Not very often	Never

<i>G: Locus of control</i>			
30. Do you sometimes have trouble making your drawing turn out just the way you want it to?	Yes	All the time	Usually
	No	Not very often	Never
31. When you did/do have trouble do you think it is because the drawing is too hard for you to do?	Yes	Always think it is because it is too hard to draw	Sometimes think it is because it is too hard to draw
	No	Don't usually think it is because it is too hard to do	Never think it is because it is too hard to do
32. When you did/do have trouble do you think it is because you need to try a different way to draw it to get it right?	Yes	Always think I can get it right if I try a different way.	Sometimes think I can get it right if I try a different way
	No	Don't often think I will get it right if I try a different way	Never think I will get it right if I try a different way
33. When you did/do have trouble do you mostly think it is because the drawing is too hard for you to do, or is it because you have to try a different way to draw it to get it right?	It is too hard to draw.		
	I have to try a different way of drawing it.		

<i>H: Levels of difficulty</i>			
34. Can you draw a good picture to go with a made-up story?	Yes	Very good	Quite good
	No	Have some trouble	Cannot draw this
35. Do you have trouble drawing a good picture of yourself and your family?	Yes	I cannot draw this	Have some trouble
	No	I can draw this quite well	I can draw this very well
36. Can you draw a good picture of real things that are in front of you, like one of your shoes or a toy?	Yes	Very good	Quite good
	No	Have some trouble	Cannot draw this

Appendix I

Reactions and behaviour in relation to self-efficacy

Characteristics	Reactions and behaviour of those with high self-efficacy	Reactions and behaviour of those with low self-efficacy
<b>Effort expenditure and persistence</b> (Section E )	In difficulty exert greater effort. (Question 21,22, 25)	In difficulty slacken or cease efforts. (Question 23, 24)
<b>Thought patterns and emotional reactions</b> (Section D, G)	Attribute failure to insufficient effort or faulty strategies. (Question 30, 31)	Dwell on personal deficiencies and see potential difficulties as greater than they really are. Attribute failures to deficient ability. (Question 30, 31)
<b>Producers rather than foretellers of behaviour</b>	Act to create own future. (Question 16, 17)	Self-misgivings undermine performance and generate stress. Foretell rather than create future.
<b>Relationship between self-efficacy and action</b> (Section G)	If skills lacking their development is promoted. (Question 28, 29)	If skills lacking adds to belief in own inability to do task. (Question 26, 27)

This table has been developed from information in Bandura, 1986. Links to the questionnaire in brackets.



## Appendix J

### Sources of Self-Efficacy Information

<p><b>Performance attainment.</b></p> <p>Based on:</p> <ul style="list-style-type: none"> <li>• Actual mastery</li> <li>• Previous experience</li> </ul> <p>(Section A)</p>	<p>The extent to which people will change their perceived efficacy depends on</p> <ul style="list-style-type: none"> <li>• the difficulty of the task (Section H)</li> <li>• the effort expended (Section E)</li> <li>• the amount of external aid received (Question 26, 27)</li> <li>• circumstances under which they perform</li> <li>• the patterns and timeframe of their successes and failures.</li> </ul>
<p><b>Vicarious experience.</b></p> <p>Based on:</p> <ul style="list-style-type: none"> <li>• Seeing another who succeeds or fails in a task.</li> </ul> <p>(Section C)</p>	<p>Modelling can</p> <ul style="list-style-type: none"> <li>• raise the self-efficacy of those with high and low confidence.</li> <li>• weaken the impact of direct experience of failure.</li> </ul> <p>The extent to which people will change their perceived efficacy depends on</p> <ul style="list-style-type: none"> <li>• a person's similarity to the model's personal characteristics</li> <li>• availability of diverse models where different people master difficult tasks</li> <li>• seeing models achieve in difficult situations by determined effort</li> <li>• the model conveying information about the nature of the task and ways of working.</li> </ul>
<p><b>Verbal Persuasion</b></p> <p>Is based on:</p> <ul style="list-style-type: none"> <li>• Realistic positive comments</li> <li>• Negative comments.</li> </ul> <p>(Question 4,5, 6)</p>	<p>Persuasive efficacy information is influenced by</p> <ul style="list-style-type: none"> <li>• the persuader's credibility</li> <li>• the level of confidence a person has in the persuader</li> <li>• if the persuader fully understands the demands of the task</li> <li>• the relationship between where the person is presently achieving and the demands of the task.</li> </ul>
<p><b>Physiological state</b></p> <p>Is based on:</p> <ul style="list-style-type: none"> <li>• Stress experienced or anticipated by failure of success</li> <li>• Fatigue or pain experienced or anticipated.</li> </ul> <p>(Section D)</p>	<p>Physiological efficacy information is influenced by</p> <ul style="list-style-type: none"> <li>• judgement of affective arousal as one indicant of coping self-efficacy</li> <li>• mood – people learn faster when in a mood congruent with the activity and recall things better when in that same mood. (Bower 1981,1983, cited in Bandura 1986).</li> </ul>

This table has been developed from information in Bandura, 1986. Links to the questionnaire in brackets.

## Appendix L

### Messages and Themes across the Sample

Message or theme	K	NE	Y1	Y2	Y3	Y4
Proportionally more girls than boys participate in drawing activities	✓					
Presence of teacher at art area encourages mixed-sex grouping	✓					
Art used as a reward or punishment	✓					
Boys and girls appear to have different experiences	✓	✓			✓	✓
Boys' comments more negative than girls' comments	✓	✓	✓			✓
Comments about scribbling (* one comment only)	✓	✓	✓	✓*	✓*	
Comments about reading, writing and drawing	✓	✓	✓	✓	✓	✓
Topics linked to gender	✓	✓			✓	✓
Teacher comments are positive	✓	✓	✓	✓	✓	✓
Teacher models drawing process (* children comment on previous experience of modelling)			✓	✓	✓*	✓*
Teacher provides visual motivation or examples		✓	✓	✓	✓	✓
Teacher encourages children to critique drawings				✓		
Children with high drawing self-efficacy dominant in social setting		✓	✓	✓	✓	
Children comment about right and wrong way to draw		✓	✓	✓	✓	✓
Children comment about being good or bad at drawing		✓	✓	✓	✓	✓
Comments about effort and ability (* children comment on knowing how to draw)		✓	✓	✓	✓*	✓*
Comments about persistence leading to success		✓			✓	✓
Ownership of ideas and topics					✓	✓