THE CHANGING FACE OF PLAY IN AUSTRALIAN PRIMARY SCHOOL PLAYGROUNDS

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DECLARATION

Except where due acknowledgement has been made, the work is that of the candidate alone.

The work has not been submitted previously, in whole or in part, to qualify for any other academic award.

The content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program.

Signed...........................................................................................................

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SUMMARY

Research is particularly scarce on the changes which are occurring in primary school playgrounds in Australia. This study looks at three primary school playgrounds and reports on the types of play children engage in at school and examines some of the factors which are influencing decisions about the playgrounds being made by schools.

Data was collected during term 4 of the school year in three Melbourne primary schools. The research questions, listed below, sought to identify commonalities and differences in each school playground. They were:

- What types of play are children engaging in at recess breaks in the playground?
- How are children using the play spaces and equipment available to them?
- How is current school policy impacting on children’s play in the playground?
- What factors are influencing current school playground policy?
- What are the perceptions of teachers and children of the playground environment and the types of play occurring there?
- How do teachers perceive their role as teacher on yard duty?
- What is the impact of teacher supervision styles on children’s play?

This was predominantly a qualitative study using a case study approach. Multi data collection methods of scan/sampling playground observations, individual and focus group interviews, questionnaires and artifact collection were employed. The case study consisted of three schools, each in a different socio-economic area of Melbourne. One school was in an inner city suburb where children live in high density housing, one school in middle suburbia and one in a new growth area with rapidly increasing enrolments. This study sought to categorize the types of play children were choosing in these school playgrounds in order to facilitate comparisons, and to identify the similarities and differences in the play of children in the three playgrounds.

By categorizing the observed play, it was possible to see if some types of play were present in one playground and not in another. The play spaces provided in each school playground were photographed and described in detail with the purpose of seeing how children use these spaces and what categories of play were observed in each space. The impact of playground rules and styles of playground supervision were
explored also as possible influences on children’s play. After a picture was constructed of each of the school playgrounds, comparisons were made and commonalities and differences were identified across the three schools. This study addressed the impact of playground policies on the types of play children engage in today in each playground and sought to understand what factors have influenced this policy.

Primary schools in Australia are currently free to make their own policies in the playground, guided in the formation of these policies by Government Guidelines for School Playgrounds and are required to ensure that all playgrounds and equipment comply with current Australian Safety Standards. Although they are encouraged to support programs such as Sunsmart, guidelines formulated by the Anti Cancer Council of Australia, it is not compulsory to do so. Despite their location in different socio-economic areas, there were many commonalities and few differences in playground policy at the three Melbourne case study schools. Each of the principal’s views about outdoor play and recess breaks were similar. There were also similarities regarding the lack of involvement of teachers and students in formation of playground policy. Both teachers and children in each school said that they did not feel part of the decision making process with regard to rules governing play in the playground. Many of the rules enforced in the schools in this study seemed unnecessary and counterproductive, such as vigilant policing of the wearing of hats on cold, overcast days. Other rules showed a lack of understanding on the teacher’s part, such as stopping boys engaging in rough and tumble play, which research has shown to be so beneficial. Variation did exist with the amount of yard duty teachers in each of the schools were required to do and also the length of yard duty sessions. However, this study showed that teachers mostly do not enjoy their role as supervisors in the playground usually describing their role as that of policing and stressful. The influence of the principal network was evident with principals in this study being strongly influenced by what other schools were seen to be doing with regard to timetabling of recess breaks and removal of equipment such as that made from treated pine. The range of play categories observed was similar in each school despite very different playspaces and equipment being provided. This study clearly shows that children will always satisfy their play needs and are quite willing to break playground rules to do so. It is concerning that by enforcing restrictive rules, schools may be pushing children towards a disrespect for the importance of rules that guide behaviours in society.
This study suggests that genuine collaboration between principals, teachers and children about playground policy, playground design, rules and supervision would have enhanced the play environment in the three schools in this study. Children, teachers, families and other community members, are all able to offer many thoughtful and practical suggestions for improvement to playspaces and equipment. This study shows that there is an urgent necessity to inform adults of the importance of outdoor play for children’s learning. With increased understanding of the intrinsic nature of play and its fundamental place in children’s learning, it would be encouraged and fostered by teachers in school playgrounds. Teachers would also become more involved in children’s learning, in general, by becoming more involved in the learning that is taking place in the playground. This study demonstrates that there is a focus on the value of indoor classroom time for learning in schools which overrides the benefits of outdoor play.

The findings in this study are relevant to the three particular case study schools and cannot be generalized to all Australian primary schools. However, it is important to note that these the schools were in diverse socio-economic contexts and yet exhibited very similar issues associated with their playgrounds. Therefore it is worth further study to see how other primary schools in Australia may experience the same issues as the three case study schools.
CHAPTER 1: INTRODUCTION

1.1 An overview of the research problem

“Remember the days of the old school yard...we used to laugh a lot...do you remember the days...when we had imaginings, and we had all sorts of things, and we laughed” (Stevens, 1997). This researcher is interested in knowing whether schoolyards today are places of “imaginings and laughter.” This study also sought to understand how increasingly restrictive rules and removal of play equipment have impacted on children’s play in the primary school playground. Evans (2003) asked the question, are play and fun now too risky for the school environment? He described significant changes to the physical environment in today’s Australian primary school playgrounds which, he wrote, have resulted in unappealing environments with minimal play equipment and rigid rules.

This study was concerned with the impact such changes are having on children’s play opportunities in three Melbourne primary school playgrounds. Many years ago, Sutton-Smith (1981) warned of the possible abolition of recess periods in primary schools and argued for their retention in light of the learning which occurs in the playground during recess breaks. By identifying the factors which currently influence changes in Australian primary school playgrounds, policy makers can decide whether the Australian education system will follow in the footsteps of the USA where new schools are often built without a playground and children have no outdoor play during the school day (Armitage 2001; Schudel 2001; Clements 2005). Although, historically children were able to play safely outdoors after school hours, this is no longer perceived to be the case in Australia where houses are being constructed with small yards and growing numbers of families are living in apartments without play spaces for children. For many children today, particularly in the urban environment, school outdoor playtime may be the only opportunity they have in their day to freely socialize, learn and play traditional games like; climb, swing, jump and run. Evans, notes that for many children today, the school playground is perhaps the only place where they get to play with other children in a setting that is supervised but still gives them a degree of
freedom to make choices about what they play and who they play with (Evans, 2003). Currently, primary schools in Australia are free to create and alter the outdoor play environment as they see fit, controlled only by the restrictions of government safety standards. This study came from a concern that these changes are not being monitored or overseen and do not recognize the importance of play to the overall development of the child. If, as Evans suggests, the school playground is one of the few opportunities remaining for children to freely play today, it is important to understand what changes are occurring there. Many important questions about factors influencing these changes and the impact of these changes on children need to be identified and addressed.

This is a case study of three Melbourne primary school playgrounds. The research interest motivating this thesis was a concern about the undervaluing of play by adults as described by Evans (2003) and the resulting impact on children’s development when they are deprived of the opportunity to play freely in the outdoor environment. The case study presented in this research was to investigate how accurate the picture being described by the local and international literature is, for three case study schools.

The study draws on the research literature on play which has grown from its beginnings in the 19th century with the focus on play behaviour in animals by psychologists, through early psychoanalytic studies of play behaviour in humans to the more recent studies again mostly in the field of psychology and early childhood education. Although there is considerable current research literature around the area of play in early childhood settings, very little exists on play in primary schools. This was not a study of children’s play, focusing on play episodes and making meaning of them. This study did not seek details about specific episodes of play, rather, the focus of this study was on gaining a picture of each playground and by using a scan sampling method, identifying the types of play children were engaging in. Nor did this study aim to focus on peer relationships, friendships between children nor issues surrounding formation of gender identity as have other studies conducted in school playgrounds in the fields of psychology and sociology. Clearly defined categories of play were developed and then used to group what play was observed as each playspace was scanned twice a day for ten days in each school. As part of this multi method study, principals in each school were interviewed, interested teachers were given questionnaires and focus groups of children were interviewed. The children in the focus groups were also given the opportunity to write and/or draw about their
playground. Data from each school was used to build a picture of each playground and subsequently each of the schools was compared to ascertain the influence of socio-economic context and playspaces in playgrounds on the play opportunities offered to children. The other body of literature drawn from in this thesis is that which exists around the importance of the playground environment to children’s learning through play and also the significance of the equipment, both loose and fixed, which is provided in school playgrounds. Much of this literature is from a natural environment focus. Finally, a small amount of research literature exists which investigates the role that supervising teachers have in the play choices children make in the school playground. This has also been drawn upon for this study. The research questions which focused the study were:

- What types of play are children engaging in at recess breaks in the playground?
- How are children using the play spaces and equipment available to them?
- How is current school policy impacting on children’s play in the playground?
- What factors are influencing current school playground policy?
- What are the perceptions of teachers and children of the playground environment and the types of play occurring there?
- How do teachers perceive their role as teacher on yard duty? What is the impact of teacher supervision styles on children’s play?

1.2 The case being investigated

Three primary schools in Melbourne were selected as the case studies, each in a different socio-economic area with one school in an inner city suburb which was established in 1874, where children live in high density housing, one school in middle suburbia and one in an outer suburban, new growth area with rapidly increasing enrolments. Each playground could be classified as traditional (which is explained later in the thesis) in design, with large areas of asphalt common to each. All data was collected in term 4, October, November and December, of the school year when the weather was likely to be fine and children allowed out in the playground every day. The whole playground was observed twice daily over a two week period in each school. Interviews were conducted and questionnaires administered in each school also.
1.3 Study rationale

Although this study is particularly focused on primary schools in Melbourne, it highlights international concerns about children’s right to play as outlined in Article 31 of the UN Convention on the Rights of the Child (Available at http://www.unchr.ch/html/menu3/b/k2crc.htm). Government funded research in education neglects the learning possibilities of the primary school playground, focusing instead on the learning occurring in the classroom (Available at http://www.dest.gov.au/sectors/research). This study is timely because the lives of children in Australia are under increasing scrutiny with some areas of concern such as childhood obesity and schoolyard bullying reaching government level with websites established by government to inform interested members of the public (http://www.healthinsite.gov.au/topics/Children___Young_People_and_Obesity, http://www.bullyingnoway.com.au). Concerns about changes in Australian primary school playgrounds have been expressed by Evans (2003) who blames the undervaluing of the play based needs of children by adults as a major factor contributing to current playground policies. These sentiments have been echoed in many parts of the world (Blatchford 1989; Hart 1997; Flemmen 2005; Clements 2005; Popp 2005; Schaffer 2005). Working in the early childhood field has strongly influenced the researcher’s belief in the importance for children of play based learning in the outdoor environment.

Although the findings of this study will be of general interest to all educators in primary schools, it will be particularly of interest to primary schools in Australia where this study was conducted. A strong concern for the impact on children having limited opportunities to play freely outdoors in primary schools has influenced the design of the study and the questions asked in this study. Increased awareness by policymakers in primary schools, of restrictions being placed on children in the school playground, will inform future policy. Another significant area of public concern which relates to this study is the increasing concern about the inactive lives of many children today in Australia, resulting in increased levels of childhood obesity. The Federal Government now has the issue of childhood obesity on the national agenda (Available at http://www.healthinsite.gov.au/topics/Children___Young_People_and_Obesity).

The suggestion that these areas of concern may be linked to a tightening of playground rules, as reported by Evans (2003), to exclude many running, chasing, tackling and ball games traditionally played by children is likely. Similar problems are
described in the USA today where childhood obesity is becoming a recognized problem (Clements, 2005).

Evans (2003) stated that Australian schools are reducing the longest break (lunch time) by up to 15 minutes, in an attempt to curb disruptive and anti-social behaviour. The Australian Federal Government launched a website in June, 2002, with the purpose of preventing and reducing bullying among children in Australian schools and for access by children, adults and schools (http://www.bullyingnoway.com.au). American research found that a prime cause of bullying on playgrounds was lack of things to do (Rivkin, 1995). If there is little to capture the interest and imagination of children, then it is hardly surprising that they become bored and turn to less acceptable ways of passing time (Evans, 2003). This research sought to find if policy makers were influenced by concerns about controlling anti-social playground behaviours and to what extent this influenced rule making, length of recess breaks and the provision of fixed and loose play equipment.

This study accepts that on the surface it appears that our school playgrounds may not be the idyllic places described in the ballad by Cat Stevens, however by collecting data from the schools in the case studies, a clearer picture will emerge of the types of experiences children currently have in their school playgrounds and the impact of changes to the playground and its rules. With greater understanding of the impact these decisions are having on the experiences of children, policy makers can make informed decisions about future changes they make to school playgrounds.

1.4 Overview of the thesis

The Literature Review provides a critical discussion of theories of play and discusses the evolution of play theories, mostly from the fields of psychology and psychiatry, from early investigations into the play of animals to more recent studies which seek to critically analyse play episodes of children in a range of contexts. Various views of the importance of play for children’s learning and development are investigated from Early Childhood research perspectives as well as from research in the field of Psychology and Environmental Education. Different categories of play developed in previous research are described and drawn from to develop the categories thought most
appropriate for this study. Research around the influence of environment and design on children's play choices is discussed as is the research about the influence of play equipment, loose and fixed, on children's play. The Literature Review also importantly showcases international concern about the trend to reduce recess breaks in primary schools in some parts of the world (Clements, 2005). Current policies which impact on school playgrounds both locally and internationally, are described and discussed in order to embed the three schools in the case study clearly within the world context. The role of supervising teacher in the playground is acknowledged and described in relation to children’s play choices and previous Australian research is drawn upon here. Finally, a pictorial history is presented of a number of schools to illuminate the development of school playgrounds in Australia over time. This visual account of changes which have occurred relates to the discussion in the literature of playground developments.

The Methodology chapter describes the qualitative approach used in this study and develops the Interpretivist theoretical framework in which this study sits. The subjective epistemology is acknowledged and is clearly linked to the choice of a case study approach. The sampling and final selection of the three primary schools in the case study is described in detail as is the pilot study. A detailed description of the methods used for data collection is given, based on methods used in previous research, and as a result of the pilot study. Choice of methods was dependent on the belief that multiple realities exist in every context. Therefore this study sought to understand as wide a range of perspectives as possible and to then draw meaningful conclusions from the data. The views of each of the participants in this study were equally valued, from the voices of focus groups of children to those of teachers and principals. Balanced with data collected from principals, teachers and focus groups of children, were the data collected during playground observations by the researcher, resulting in triangulation.

The Results chapter displays the data in a number of ways. A map of each playground is included with a breakdown of the total area into numbered playspaces. Each of these playspaces is photographed and described and the data collected during observations in each playspace is displayed visually in a graphed format. Data from interviews with the principals, focus groups of children and teacher questionnaires is grouped under headings, based on the research questions, for each school. All data from each school is then summarized and the data from the three schools compared.
The final Discussion chapter draws from the literature to discuss the results and the research questions. Conclusions are drawn for each of the schools in the case study, comparisons are made and commonalities explained. Suggestions of examination of further schools to provide a broader picture of playground policy in primary schools in Australia are made. The conclusions of this study refer to current government policy as well as policy making within the three case study schools, regarding playspaces, equipment, playground rules and playground supervision.

1.5 Glossary of terms

**Recess**
In Victoria recess breaks are timetabled into the school day. Commonly there is a morning break of 30 minutes and a lunch break of one hour. The children spend this time in the playground under the supervision of teachers.

**Prep (Preparatory grade)**
The first year of primary school in Victorian schools where this study was conducted.

**Integrated students**
Students with a diagnosed disability in receipt of financial support from the government to assist with their education.

**Adventure Playgrounds**
Public playgrounds, first established in Emdrup, Denmark during World War 2 in response to children playing in dangerous bomb craters. These playgrounds exist in parts of Europe today. Large numbers of children play under the guidance of a playleader.
CHAPTER 2: LITERATURE REVIEW

2.1 Play: an introduction

Artefacts from ancient civilizations reveal countless examples which show that through all periods of history and in all cultures, children have played. Children’s toys have been uncovered in the archeological excavations of every continent of the world. Children at play are depicted in artwork, engaged in a range of play activities including games with rules, imaginative play and play involving motor skills such as running, jumping and swinging. Anthropological studies of primitive cultures reveal the existence of many categories of play including mimicking, acting, singing games and contests (Mitchell, 1937). This presence of children’s play over time and throughout the world has led to many people developing views about the purposes of play. One of the earliest advocates of children’s play was the Greek philosopher Plato (Huizinga, 1949) who recommended that children be provided with toys such as tools and dolls so that whilst playing, they could prepare themselves for the serious tasks they would face in adulthood. Plato’s view of play as preparation for life is a perspective still held today by researchers such as Van Gils (2005) who describes the learning of social and emotional skills necessary for life through play.

2.1.1 Theories of play

During the early 1800s theories about children’s play began to emerge. As its intrinsic nature became increasingly recognised, a desire to understand play and its importance to human learning and development became a focus of educators, psychologists and others interested in children’s learning. Around the world theories emerged and some of those early perspectives still have a strong influence on educational practices today. In Germany the kindergarten movement grew and its founder Froebel was among the first to discuss the importance of play for young children’s growth and learning. He also noted the intrinsic nature of play,
It is not alone the desire to try and use (their) power that prompts (children) at this age to seek adventure high and low, far and wide, it is particularly the peculiarity and need of (their) innermost lives, the desire to control the diversity of things in their connection with a whole, especially to bring near that which is remote, to comprehend (the outer world) in its extent, its diversity, its integrity; it is the desire to extend his scope, step by step (Froebel, 1826, p.97).

Froebel recognized the educational potential of learning through play and established kindergartens where young children could freely experience play in all its dimensions in a range of playspaces, both indoors and outdoors. His educational philosophy is still influencing the kindergarten movement in many countries around the world today, including Australia.

It was not until the late 1800s that play became a subject of formal investigation in a quantitative paradigm. In the late nineteenth and early twentieth centuries, psychologists were hypothesizing on the relevance of play to human development and designing and conducting experiments aimed at increasing their understanding of the nature and importance of play. Interestingly the first formal investigations of play were in relation to the play of young animals. Plato’s notion that play was a preparation for life for humans was supported by the research of Groos in the late 1800s in relation to animals. According to Groos (1909) play combines with instinct to facilitate the survival skills of higher order animals, including humans. Groos believed that during play, the skills necessary for survival are practiced, improved and adapted to the environment. He goes further, stating that all youthful play is founded on instinct and is absolutely necessary for the development of physical skills. Groos also recognized the role of imitation in play, where skills are often copied from parental figures. Groos suggested that his findings would also relate to humans and they are still referred to today in many of the discussions of children’s play behaviours. This linking to human play was a secondary consideration, indeed an afterthought, and definitely not a focus of his work.

Gulick’s recapitulation theory (1920) emerged at the same time and advanced the opposite view to Groos. This theory of play argued that the process of development of an organism recapitulates the history of its development as a species. This idea stems from a Darwinian conception of evolution (Darwin, 1859). Gulick (1920) believed that in play every word and movement is instinct and that children rehearse the activities of their ancestors and repeat their life’s work in a range of ways. Gulick tried to explain
that games re-enacted from the history of the race were intrinsically more rewarding than newer activities. Although this theory has not endured and has not been supported by research since, the discussions around it in the early 1900s illustrate the increasing focus on children’s play by the scientific community.

Around the same time Spencer was investigating the play of animals and relating his findings to the human species as Groos had. His now famous conclusion was that the impulse to play can be attributed to “the surplus of vigour” (Spencer, 1878). Spencer believed that the play of animals and children serves no real purpose other than “the immediate gratification” and possibly increased physical ability due to exercise. Spencer’s “surplus energy theory” says that “specific faculties” go through cycles of activity and rest. He wrote:

Every one of the mental powers, then being subject to this law, that its organ when dormant for an interval longer than ordinary becomes unusually ready to act…it happens that a simulation of those activities is easily fallen into, when circumstances offer it in place of real activities. Hence, play of all kinds—hence this tendency to superfluous and useless exercise of facilities that have been quiescent (pp. 629-630).

Although rejected by many educational researchers and developmental theorists since, the “surplus energy theory” still has a strong following among educators and has become deeply embedded in the school culture (Malone and Tranter, 2003). In the primary school setting today, the surplus energy theory is still given credence by many teachers who see recess breaks as a time for children to burn up, surplus energy in order to return to the classroom ready to settle into work (Pellegrini and Davis, 1993). It may have been one of the reasons recess breaks were first introduced into the school curriculum. It can be reasonably concluded that Spencer’s theory has contributed to the previously mentioned undervaluing by adults of other values of play.

In the early twentieth century, understandings of the purpose of children’s play broadened and psychoanalytic theories began to emerge. These went beyond the previous animal studies, with data being collected from human subjects rather than animals. Deeper dimensions of interpretation were posited and understandings of children’s play gained a richness they had previously lacked. The interest of psychoanalysts in play led from the early observations of Freud (1932) and Walder (1936). Freud’s research over many years led him to believe that play provided
children with an avenue for wish fulfillment and the mastery of traumatic events (Freud, 1933). Wish fulfillment in play allowed children to escape reality, thereby providing a safe context for venting unacceptable, aggressive impulses. This was a completely new concept which illustrated the depths of meaning which may be associated with the play of children in a way which had previously not existed. For the first time, the possibility of play being an essential part of children’s healing after trauma became a topic of discussion. Freud’s suggestion that children have a need to escape reality by moving into an imaginary world indicated that the importance of children’s play should not be taken lightly and should not be dismissed as unimportant by adults. Freud’s writing indicates that he had a reverence for children’s play that exceeded a scientific understanding of its importance to the psychological wellbeing of children. He described the process by which children create their imaginary worlds as being similar to the work of an artist, when the very soul of the creator is an integral part of the new creation.

*Every playing child behaves like a poet, in that he creates a world of his own, or more accurately expressed, he transposes things into his own world according to a new arrangement which is to his liking. It would be unfair to believe that he does not take this world seriously; on the contrary, he takes his play very seriously, he spends large amounts of affect on it. The antithesis of play is reality, not seriousness* (Freud, 1933, p.4)

With this knowledge, an adult who interrupts the imaginary play of a child must realise what they are destroying. Not only do they shatter the imaginary world the child has created from within themselves, they drag that child back to the reality it needs to escape. Undervaluing this type of play may have serious consequences for the child who sees it as an undervaluing of their needs and their very self.

Fortunately, Freud’s valuing of imaginary play was not ignored and new research was inspired. Walder (1936), influenced by the theories of Freud, was very interested in imaginary play. He also saw that the contribution of psychoanalysis to the understanding of the play of children was important. He believed, as did Freud, that in their games (role plays) children elaborate material which they have experienced which he described as fantasy gratification. Walder believed that much of children’s play is a manifestation of the pleasure principle and he appeared to dismiss a large range of types of children’s play under this heading. There was a suggestion that this play, motivated by children’s desire to experience pleasure, was less important. His
focus moved quickly to a specific type of imaginary play, those times when children play about experiences which are devoid of pleasure, such as painful or frightening experiences. He was interested in understanding why unpleasant experiences so often constitute the material of games (imaginary play scenarios). Walder acknowledged Buhler’s theory which described “functional pleasure” (Buhler, 1930), that is, the pleasure experience in pure performance without regard to the success of the activity. Walder’s theory disagrees with Buhler’s because he believed a painful experience is repeated in play, not after it has been overcome and mastered, but before, while it is still unmastered; and it is eventually mastered because of the playful repetition itself. Walder describes play about experiences which a child did not enjoy as discharging an affective residue as they repeatedly engage in this play (Walder, 1936). This view supported Freud’s belief, “We see the children repeat in their play everything that has made a great impression on them in actual life, that they thereby abreact the strength of the impression, and so to speak make themselves masters of the situation” (Freud, 1933, p.1). Extending this theory, Walder believed that a child will play about a situation in which they were the passive participant, changing their role to the active participant (Walder, 1936). He used the example of a child’s visit to a dentist which is later played out with the child in the role of dentist, treating another player, maybe a younger sibling or a doll (Walder, 1936). Walder’s work complimented Freud’s work about imaginary play and extended the understanding of role play by children from mere imitation to an attempt to gain mastery over unpleasant experiences.

Walder pointed out that mourning also belongs to the assimilative process in the category of repetition compulsions. A child mourning the death of a loved one or mourning the loss of a parent resulting from family breakdown, will assimilate the suffering entailed by this task of separation by repetitive compulsive role play (Walder, 1936, p.219). This is increasingly significant today in Australia where the frequency of family breakdown continues to increase. The likelihood of a child experiencing this type of grief grows at an alarming rate. The entire process of marriage breakdown, along with post-divorce circumstances and transitions, are crucial factors affecting children’s wellbeing (Pryor and Rogers, 2001). Given delayed child-bearing, the proportion of divorces involving children under 18 years old has fallen over the last 20 years (from 61 percent in 1980 to 53 percent in 2000). On the other hand, given the increase in the total number of divorces and the still continuing but slow growth in the child population, numbers of children involved in divorce has increased (46,800 children experienced the divorce of their parents in 1980, compared with 49,600 in 2000) (Australian Institute of Family Studies, 2001). In Australia there is an obvious
need to facilitate healing process for children experiencing this type of mourning and trauma. With increased understanding, educationalists today may incorporate this facilitation of imaginary play opportunities for children into their curricula.

For the first time, as theories emerged, play and school were linked when Walder related his findings to the school setting saying that he believed that this knowledge had a practical application in pedagogy. He described the teacher as being in a position to help the child obtain this kind of abreaction by providing opportunities for imaginative play (Walder, 1933). Unfortunately this theory has not been embraced to the same degree as the surplus energy theory in schools in Australia. This is an example of the undervaluing of play by adults or their lack of knowledge about the critical role imaginary play has for an increasingly large number of children today in Australia.

The theories of Freud and Walder have strongly influenced the formalised practice of “play therapy” today as described by Cattanach (2003). Growing from the psychoanalytic and cathartic theories, play therapy exploits play as a natural situation for children to express themselves. Play therapy is a mixture of mechanisms which encourages children to divest themselves of negative affects by handing them on by purging them or transferring them, and a process whereby they are assimilated (Freud, 1933). Importantly, it should be asked, for those children without the opportunity for formal play therapy in their lives, does the primary school have a role in providing opportunities for this play? Given that 49,600 Australian children experienced the trauma of parents divorcing in 2000, and this is only one example of trauma experienced by children, Walder’s point that teachers are in a good position to help these children, is more poignant than ever.

Erik Erickson addressed the mastery aspect of Freud’s theory of play in *Childhood and Society* (1963) and further developed it by including the interactions of social environment and biological makeup on children’s play and learning. Erickson believed that humans continue to grow and develop through the whole life cycle. This was an early glimpse of today’s perspective that learning is a life long process. Erickson posited that through play, children could symbolically structure the world and create the feeling of being grown up. Rather than attempting to formulate generalizations for all children, as Groos and Spencer had, the psychoanalytic theories of Freud, Walder and Erickson came from a concern for the behaviour of the individual. Erickson acknowledged the influence of social context on the learning of individuals, a notion
supported by Vygotsky (1978) and extended into an ecological model by Bronfenbrenner (1979). This contextualising of children’s learning supports the belief that educational programs designed to meet the changing needs of individual children will provide more meaningful learning opportunities than educational programs planned by a central body, without an awareness of the needs of communities. Mirroring this view of classrooms which have a strong awareness of the context of individual schools, reflected in the educational philosophy of schools, is the idea that school playgrounds should also be sensitive to the context of a school. The replication of playgrounds which all look similar and contain the same style of fixed equipment, does not acknowledge the individuality of schools and communities.

As the psychoanalytic theories of play were emerging, they were being balanced by theories stating that play has a restorative role as a contrast to work (Partick, 1916 in Ellis 1973). These restorative theories suggest that there is a need for an individual to emit responses other than those used in work to allow recuperation. This does not explain the use in play of activities also used in work and also suggests that children only play in response to periods of work. These theories placed work and play at opposite ends of the spectrum, a dichotomy still supported by many adults today unfortunately. The consequences of this view of play as opposed to work leads to the undervaluing of play by adults. This has been described by Evans (2003) as one of the major factors impacting on the changes occurring in primary school playgrounds in Australia today.

Other theories of play, describing its intrinsic nature, came forward during the twentieth century. Rather than being purposeful, play was being seen by some to be an integral part of childhood, a voluntary activity, for its own sake. It brought the joy and the consciousness that was “different” from ordinary life (Huizinga, 1949). Sponseller (1982) strongly stated that, regardless of external influences, children’s play was seen to be driven by internal motivation, internal control and internal reality. This perception of the intrinsic nature of play suggests that regardless of the play environments provided by adults, children will still engage in a range of play types.
2.1.2 Play: learning for life

The concept of learning for life suggests that learning continues throughout the lifespan and is not just the realm of childhood. Importantly, in relation to this study, learning for life suggests that all the skills needed for life are not learned in the classroom (Van Gils, 2005). The skills of negotiation, bargaining, sharing, tolerance, the basic skills of democracy are thought by many to be learned in the playground, when children are playing, away from the restrictions and interference of adults (Sluckin 1981, Popp 2005).

The notion that play is important for children’s learning is not a recent one. Some early educationalists disagreed with the teaching methods of their time, based on harsh discipline and rote learning. These included Comenius (1592-1670), Rousseau (1712-1778), Pestalozzi (1782-1827) and Froebel (1782-1852) who all stressed the value of play as both natural for children and as a way of learning. This view of play was not widely accepted by the society of the time who were influenced by social factors including a need for children as labourers, a view that children were “little adults” and a desire to protect children from their natural evil tendencies (Jamrozik and Sweeney, 1996). The dichotomy between work and play was firmly embedded and strongly believed. Play as a means of learning for life was proposed by Vygotsky (1978). He considered play to be a very serious part of life and not restricted to the realms of childhood. Vygotsky’s theories of learning were socio-cultural and he proposed that children’s learning existed within and was influenced by the society in which they lived. He expressed concern that play was not valued adequately and he criticized previous theories for not considering the role of play in adolescence. Vygotsky did not consider play symbolic, as did Piaget (1962) and warned about the danger of play being considered a system of signs that generalize reality. Vygotsky linked children’s play in a practical way with the role of teacher by describing how teachers could scaffold children’s learning. He explained that a playing child was operating at full capacity in whatever they were playing and that an adult could move their learning forward by building on the knowledge being displayed. Educators who believe in play based learning today, are acknowledging the importance of Vygotsky’s theory.

Piaget (1962) also saw play as a means of learning for children but without the socio-cultural context of Vygotsky with play in the Piagetian tradition being studied as a solitary construction rather than an inherently social activity. Piaget viewed play as
intellectual adaptations, labeling stages of play development which corresponded to his stages of human development: practice play (sensori-motor), symbolic play (pre-operational) and games with rules (concrete operations). Piaget, like Freud, assumed that play ceased with the emergence of abstract and logical thought processes, a view that does much to cement that opposing of work and play, previously discussed.

Sutton-Smith (1966) raised many objections to Piaget’s theory, most of which were immediately repudiated by Piaget (1966). Sutton-Smith criticized the Piagetian theory at each of the stages of development of the child, saying that play remains important and does not become more realistic or rationalistic as intelligence develops, but remains symbolic, ritualistic and playful even into adulthood. Sutton-Smith (1951) looked closely at social and cultural influences on children’s play as Vygotsky had and he believed that play as learned behaviour simply means that children play in a way that is influenced by the feedback from adults, both positive and negative. This is significant for this study where data will be collected in primary school playgrounds where children’s play is supervised by adults. It will be important to gauge whether the negative and positive comments of supervising teachers have an impact on the play of children. The influence of teachers on yard duty will be one focus of this study.

Many of the previous researchers into play as a means of learning emphasize not only its importance for children’s learning but also its complexities. Bengtsson’s (1972) overriding belief that children are gluttons for life and have a need for all the various experiences which play can provide, explains the intertwining of play and learning. The importance of providing opportunities for children’s free play becomes more evident considering the findings of psychologist David Elkind (1989) who has done extensive research into what happens to children who are not allowed to play. Elkind warns that many parents now overprogram their children by enrolling them in too many activities. Elkind believes that children no longer have many opportunities to play freely and he says that the result of this is that more children are suffering from stress, emotional and mental breakdowns and other conditions that used to be considered adult diseases and conditions.

"Unfortunately the value and meaning of play are poorly understood in our hurried society. What happened to adults in our society has now happened to children. Play has been transformed into work. What was once recreational-sports, summer camp, musical training-is now professional and competitive."

The pressures of succeeding in the world have replaced play with a programming of ‘worthwhile’ experiences for children. When this is linked with the findings of research in the USA by Clements (2005) which outlines the dangers associated with decreasing amounts of physical activity in the lives of children and increasing levels of childhood obesity, a very worrying picture emerges. Clements notes that warnings of decreased lifespan and increased teenage depression appear to be falling on deaf ears in the USA. Apart from these distressing physical spinoffs of less physical activity in the lives of children, schools are becoming recognised as playing a vital role in the wellbeing of children. In Australia the statistics, although not quite as alarming as those in the USA, are very concerning as the wellbeing of children today is considered (http://www.healthinsite.gov.au/topics/Children__Young_People_and_Obesity)

2.1.3 Reaching a definition of play

Because of the many dimensions of play, it is difficult to reach a definition that encompasses all its aspects. This dilemma for researchers has been described by Bishop and Curtis (2001) who themselves reach a description rather than a definition. They have categorized play into three sections:

1. play with high verbal content
2. play with high imaginative content
3. play with high physical content.

These descriptive categories fall short of illustrating the phenomena of play but are useful as a starting point for developing categories of play.

The extensive diversity of play was described by Bertelsen (in Bengtsson, 1972) who was the first play leader of the first adventure playground in Emdrup opened in 1943,

*Children’s play is not only movement, action and noisy behaviour. It can just as well consist of daydreams, lying in the grass pondering the shapes of clouds...through observation the child gathers material for play—watching, he gathers impressions to convert into play...idleness, doing nothing, just letting life pass through the senses, is also a game. Idling play opens up the perspectives into a world of daydreams - the places where the child can lie and listen to the grass are among the milestones in his life* (in Bengtsson, 1972, p. 23).
Bertelsen’s description illustrates the dimensions of play he observed during his years as a playleader. In the context of this first adventure playground, children were participants in a voluntary capacity, not the captive crowd of children one would find in a school playground. Also in this context, the adult playleader’s role was one of supporter and observer, rather than that of enforcer of playground rules as described by Evans (1990).

Bertelsen’s understandings are supported and extended by Piaget (1962) who believed that play allows children to assimilate information they are gathering from their environment into their minds and helps them make sense of it. His explanation that through play they are able to find ways to own their knowledge links with Bertelsen’s description of idling play, times filled with reflection and thoughts.

A richer picture of play emerges from Pellegrini and Blatchford (2000) who explained in detail, the complexity of children’s play. They defined play in line with Rubin, Fein and Vandenberg (1983) along three dimensions: as psychological disposition, according to contexts that elicit playful behaviours, and as observable behaviours:

1. Play as disposition- when children are intrinsically motivated to actively engage in a non-literal and flexible way.
2. Play as context- when children freely choose play which is familiar and stress free.
3. Play as observable behaviours- engagement in activities easily identifiable as play.

Pellegrini and Blatchford (2000) also discuss the notion that play can be categorized as more or less play not dichotomously as play or not play. Importantly this weakens the commonly held dichotomous view which dismisses play as of little value when compared to work. As previously explained, a perspective which continues to promote the undervaluing of play by adults. Pellegrini and Blatchford concluded that behaviours meeting all criteria can be categorized as “pure play.” In other words, play should be rated along a continuum. This intriguing concept is unique in the body of research on play and suggests that, if play is intrinsically motivated, then some play episodes will be more satisfying to players than others. What are the implications of this for designers of playspaces, designers of play equipment and supervisors of children’s
play? Is this significant for those who believe that play is the way children learn the skills they need for life?

Importantly, Pellegrini and Blatchford (2000) also concluded that play can be used as a gauge of the quality of the environment and that low quality environments inhibit play. This links with the findings of Malone and Tranter (2003) who described affordances for play, provided by different school playground environments. Like Pellegrini and Blatchford, they suggested that some school playground environments encourage play of a lower quality than others. If this is correct, it is extremely significant, not only for those involved in the design processes but for all those who are interested in children’s learning through play. Can learning in the outdoor environment be enhanced by provision of certain types of playspaces and equipment? What happens in school playgrounds that are barren, asphalted, uninspiring environments, devoid of interesting natural features? Does the play in some primary school playgrounds look different to the play in others? By collecting data from three primary school playgrounds in different socio-economic areas of Melbourne, this study may reveal the impact of different playground environments on the play of the children.

For the purposes of this study it is important to clearly articulate the definition of play that is being used. This definition has been developed on the work of other researchers and theorists as described in this literature review, and on the researcher’s experience of observing children at play in both preschool and primary school contexts. The following definition applies to this study.

Play is intrinsically motivated. It can take many forms. It is usually fun. It can involve an imaginary world with imaginary characters and situations, but it may not. It can involve physical activity, but it may not. It can be a shared experience or it may be solitary. During play, children are operating at their highest capabilities in whatever they are doing and often there is risk-taking of some sort. Through play children learn physical, social and emotional skills and they practice them. During some play episodes, children try out character roles. Sometimes play has a cathartic affect. An activity which is play for a child one day, may not be the next. The play needs of the individual change.

The complexity of this definition is a reflection of the complexity of play. Play is such an integral part of the lives of children and therefore is evident throughout their daily lives, in every context imaginable. Because of the individual variations of personality,
interests, opportunities, lifestyles and environment, play manifests in as many different ways and there are individual children.

2.1.4 Categories of play

Pellegrini and Blatchford (2000) discussed their belief that although pre-school children’s play can be captured in a four-level scheme of functional, constructive, dramatic and rules, this categorization system does not account for most of what primary school children do when they play in the school playground. For the purpose of recording observations, categorizing the play of children in the primary school playground is a challenging task. Given the intricacy of children’s play as illustrated in the definition given for this study, designing categories which encompass every possible manifestation of play in the primary school playground is very difficult. However, whilst acknowledging its complexities, it must be attempted, in order to broadly understand what types of play are occurring and what types of play may be missing in individual primary school playgrounds. The aim of labeling the observed play of children is not to define what they are doing, but rather to record it so that a picture can be built of the types of play which is occurring.

Benjamin (in Bengtsson, 1972) captures the complexity of play when he describes the difficulty of deciding when play is pretence and existing in an imagined context and when it is practical practice for life. In his role as play leader of the Grimsby adventure playground opened in London in 1955, he sought to understand the links tying work and play together. In the following quote he reflects on the difficulty of deciding the type of the play and how to label it:

*The dividing line between play and work is a contentious point. If play is a spontaneous activity, undirected by adults and complete in itself, then the canteen (set up and run by the children) was mere pretence. But if we take it as an educational stage, a preparation for life, then there is little doubt that the canteen was very much a reality of the workaday world (p.32).*

Benjamin’s example beautifully illustrates the blurred lines between categories of play. To some degree, categorization must be linked with the interpretation of the observer,
and therefore influenced by their own life experiences. The aim of categorization is to record the types of play observed. For the purposes of research, it has been necessary for categories of play to be made and labeled. Every researcher must arrive at descriptions of categories which are useful for the purposes of their individual study. Based on prior knowledge and information gained during the pilot study, a list of categories was arrived at. As much as possible, previously used titles of categories were used and two new categories were created, these being scientific/sensory and popular. These new categories are drawn from the research outlined below, which has described children’s play in settings other than the school playground and from these descriptions, two new categories have emerged, appropriate to the play in primary school playgrounds.

The following categories are an attempt to include all observable play in the primary school playground and, importantly, to acknowledge that some play episodes will be included in more than one category. It is important to again acknowledge that it is not always possible to know whether an observed activity is in reality play for every participant, since some children may not be willing participants, but it is beyond the scope of this study to decide this during data collection. For the purposes of creating categories for this study, and because all activity needs to be included, all activities children are engaged in the playground will be placed under a category heading.

In each of the following categories, a description will be given of previous examples when the same category has been used in research and writing. In addition to this a description of what this type of play would look like in the primary school playground will be given. The importance of each type of play to children’s learning, as described in previous research, will be explained. Finally, the reasoning behind why each category has been chosen for this study will be outlined.

**Games with rules**

In the primary school playground, it is possible that games with rules will be observed in different forms. This type of play will be easily recognisable when it is formally organised in a traditional way, such as football, netball or cricket. It will be less easily identified when it is run informally, without easily recognisable form. For example it may be a game using traditional equipment but with adapted rules in a playspace not designed for such play. Games such as the many forms of “chasey” can be recognised
as a game with rules, with winners and losers, however, it can be conducted in any playspace, from bushy areas to netball courts.

The importance of games with rules was discussed in 1959 in a paper by Roberts, Arth and Bush titled “Games in Culture.” This paper developed what is now recognised as the standard classification of games into those of physical skill, strategy and chance. In many subsequent publications, especially with Sutton-Smith, Roberts et al showed how such games serve in all societies as models of different kinds of activities in real life, activities that differ in the kinds of roles they require of the participants in such things as competing successfully, accomplishing objectives while being loyal and obedient, and being willing to make decisions with inadequate information and take responsibility for the consequences of those decisions (Roberts et al. 1959). Piaget (1962) also described games with rules as a type of play children engage in when they reach the ‘concrete operations’ at age 8. Hughes (1999) discusses the importance of “games with rules” saying that it was Piaget in 1962 who described games with rules as being the major play activity of the civilized being. Hughes further explains that this type of play teaches the child how to obey rules and follow moral order.

Eifermann (1971) undertook a large scale observational study of play (150 observers) in primary schools in Israel encompassing the cultural, religious and geographic contexts of that country. She studied the play of small groups of children and reported very clear patterns. Her work around this category of play pinpointed its increased popularity for children in the middle years of primary school. Participation in rule governed competitive games peaked in fourth grade then after that, participation in these activities dropped steeply towards adolescence and beyond when, she found, children preferred non rule orientated activities. Importantly these findings have implications for what age group of children will be observed engaging in games with rules and where they may be located in a playground. It will be interesting to see whether children in the contexts of this study show the same tendency to engage in games with rules around fourth grade, as did children in Eifermann’s study.

Extending the discourse around games with rules, Jambor (1999) found that engagement in interactive games such as “chase”, where both boys and girls compromise and negotiate roles through language forms, can predict academic success. His findings suggest that games with rules have many benefits for children, not only physical but social and cognitive also. This is hugely significant for those who
are interested in children’s learning in general, and specifically as it links with their play.

Adding a further dimension to play involving games with rules was Flemmen (2005) who discussed the different forms of this type of play. He described organized games as having vertical communication with adults taking the initiative, deciding the content, organizing the game and guiding the activity. He contrasted this with spontaneous games with rules in which there is horizontal communication among players who decide what is played, where it is played, how it is played and who plays. In this type of play children learn to compromise and Flemmen has called this play, a basic school for democracy. These two forms of communication during games with rules would be the contrasts found within Elkind’s (1989) previously described trends and the move from ‘free play’ after school to formalised experiences.

Yet another group of benefits gained by children from this type of play is described by Van Gils (2005) who explained that games with rules give children a feeling of togetherness, competition and complex rules. Van Gils believed that whilst playing games with rules, children are learning about the limits of others and the ways of influencing other players through violence, seduction and coalitions. He says that importantly, children learn that they can be hurt during these negotiations and that life is not all harmony and peace, thus building resilience.

This category, games with rules, is suitable for use in this study because it is a well recognized title and a commonly used category. As described in this review, it has been used in many studies since play first became a topic of research. Various researchers have investigated different aspects of this type of play and this has resulted in many descriptions of its importance in the lives of children, as previously described.

**Imaginative play**

Since researchers first began to study play there have been many advocates for the importance of imaginative play. Freud (1933) proposed that imaginative play works as an emotional cathartic release, as a means of reducing stress and anxiety and as a way to understand traumatic experiences. He believed that once negative feelings of fear and aggression have been expressed, children are able to move on to
communicate more positive feelings such as joy and contentment. Later Piaget (1962) explained that imaginative play is vital to cognitive development. However he believed children are not acquiring new skills during their dramatic play but are practicing skills they have recently acquired in non-play situations. Without this practice in play contexts, Piaget proposed, their skills would be quickly lost, therefore he strongly advocated for this type of play to receive support.

Blatchford (1989) described the work of Iona and Peter Opie who, during the 1960’s, collected contributions from more than 10,000 children in British schools, detailing the games played by children between six and twelve years of age in the street, park and playground. Blatchford explained that the play described by the Opies was occurring in a separate world from adults, where adults only get in the way. He wrote that during their play children are in control and it is an opportunity for them to learn about their environment. He believed that the imaginary settings they create can enable them to experience beyond the everyday. Importantly, this description shows that while children may be engaged in skipping games or chasey games they may also have created an imaginary setting for their play. As far as categorizing an episode of play is concerned, it is difficult to know whether an observed game with rules is set in an imagined context and whether or not the children are playing imaginary roles. During observations, clues may emerge, such as the sounds made by children and the movements they make, which could give the observer more information.

Imaginative play has often been celebrated as a very important component of young children’s lives. Jambor’s (2000) findings about the cognitive benefits of games with rules sits well beside the findings of Smilansky (1968), Ellis (1973) and Landreth (1991) who all described the cognitive benefits of imaginative play. They also described the enhancement of peer relationships which is possible during this type of play as well as the emotional well-being it can promote. Smilansky (1968) investigated how imaginative play helps children develop socially and found it to be a valuable vehicle for the learning and practicing of social skills. This is supported by Frost (1992) who also captures the importance of imaginative play to children’s social development when he states it is difficult to overemphasize the importance of this type of play. He describes the development of skills necessary for children to regulate their own actions in order to keep the play going, to control themselves and their emotions, to be flexible in their responses to players and to transition from being an egocentric to a social being. The amount and complexity of fantasy imaginative play has been found to be a predictor of social skills, popularity, and positive social activity (Connelly and Doyle,
This is further supported by Paley (1988) who found that through imaginative play children continue to build understandings of their world. “Fantasy play is their ever dependable pathway to knowledge and certainty” (Paley, 1988, p. viii). In addition to previously mentioned benefits, it is also agreed by some researchers that imaginative play contributes to children’s emotional development by helping them reach places of increased happiness, more positive self-concepts, and greater feelings of power (Frost, Wortham and Reifel, 2001).

According to other research, the play of children changes as they grow and by school age they require spontaneous action. They become representers of their experiences, rather than just doers of activities (Jones and Reynolds, 1992). The understandings they have built through exploratory play experiences are symbolized by things, actions, plots and behaviours in their imaginative play. They also describe imaginative play from a “preparation for life” perspective, explaining that pretending allows children to represent real-life problems and practice solving them, thus developing their problem solving skills.

Imaginative play has rules of its own and the importance of playing by rules is emphasized by Huizinga (1949).

All play has its rules. They describe what holds in the temporary world circumscribed by play...The player who trespasses against the rules, or ignores them, is a spoilsport. The spoilsport is not the same as the false player, the cheat; for the latter pretends to be playing the game and, on the face of it still acknowledges a magic circle. It is curious to note how much more lenient society is to the cheat than the spoilsport. This is because the spoilsport shatters the play world itself. By withdrawing from the game he reveals the relativity and fragility of the play-world which means literally “in play”. Therefore he must be cast out, for he threatens the existence of the play community (Huizinga, 1949, p.88).

Importantly, this aligns imaginative play with games with rules and by doing this, its importance and complexity becomes more evident.

This is a suitable category of play to include in this study because it encompasses many of the observations of play made in playgrounds in previously mentioned studies. In addition to previously mentioned benefits, it is also agreed by some
researchers that imaginative play contributes to children’s emotional development by helping them reach places of increased happiness, more positive self-concepts, and greater feelings of power (Frost, Wortham & Reifel, 2001). Importantly, therefore it will be included as an important part of this study.

**Chants and rhymes**

This category of play was recognised by researchers alongside the categories of games with rules and imaginative play. Piaget (1965) observed chants and rhymes and documented it in his research. This type of play was the focus of the research of Opie and Opie (1959, 1980) that observed children and recorded their chants and rhymes over many years. In a ten month period in 1954-55, Dorothy Howard, a post-doctoral Fulbright scholar, traveled across Australia documenting children’s chants and rhymes in both rural and urban communities, placing emphasis on the importance of this type of play. The extensive work of Dr. June Factor and Dr. Gwenda Davey (Factor, 2002), begun in the 1970s, researching this area of children’s play and its relationship to folklore has revealed the complexity and value of this play. Their initial research has developed into The Australian Children’s Folklore Collection consisting of more than 10,000 card files and other documents listing children’s games, rhymes, riddles, jokes, superstitions and other kinds of children’s folklore, together with photographs, audio cassettes, video tapes and play artefacts (Available at [http://www.museum.vic.gov.au](http://www.museum.vic.gov.au)). An important aspect of this collection is the evidence of children adapting the chants learned from others, to meet their own context. In the multicultural primary school playgrounds of Melbourne, this may have implications for the play observations in this study and interesting adaptations of traditional chants and rhymes may be observed. Play rituals in a multicultural society have the potential for facilitating understandings between children, both physical and social and require memorizing of chants and rituals (Sluss, 2004).

The opportunities for children to engage in chants and rhymes in today’s urban society in Melbourne may be more restricted than in the past when children played openly outdoors around their neighbourhoods. It is likely that today, the school playground is one of the few opportunities they have for such play, therefore it is important in this study, to identify if this type of play is still common in the playgrounds studied. It is an important category of play for this study because of its well documented historical significance in the play activities of Australian children. It is a category of play which should be reasonably easy for an observer to identify with examples being skipping
games and elastics. The opportunity for an observer to hear the children’s chants and rhymes would confirm such play.

**Popular**

This newly created category was named for this study because it described type of play that might be seen in a school playground where players take on roles from popular culture in their play. The notion of play going through cyclical phases, influenced by fads, weather, sporting and cultural events, is suggested by Rivkin (1995). The influence of popular trends and current events on children’s play is an interesting concept, particularly relevant today when examples of “superhero” play is sometimes banned from kindergartens and schools because of the fear that children will get hurt or harmed in some way whilst engaging in it (Paley, 2004). This influence of popular culture could be integral to episodes of imaginative play, games with rules and chats and rhymes, adding a further dimension to the play. The development of chants and rhymes and the influence of popular themes have been well documented in the work of Factor (2002). The complexity of children’s play is particularly evident when observing children whose play is influenced by popular themes within a game with rules, where players are imitating current sporting events, for example children playing football games during the football season, and taking on the roles of well known players, shouting out their names during play. This category also includes imaginative play which contains characters and storylines from popular television programs or movies and could involve props which are marketed in conjunction with children’s television programs and movies. With the prevalence of products marketed to children which are linked to movies and television programs, it would be interesting to observe how common connected themes are in the play of children in the primary school playground.

**Scientific/sensory play**

This new category has been built on the work of previous researchers who have described sensory learning via the play of young children. This category extends to an older age group of players, primary school children, and specifically links their sensory learning to understanding scientific principles. Many theorists and researchers have described the sensory experiences of young children as a means of gaining understandings and making meaning of their world (Froebel 1826; King 1979; Rivkin 1990; Frost et al. 2001). They have described sensory play as the fundamental way in
which young children learn. This understanding forms the basis of program design in Early Childhood curricula, both in the indoor and outdoor learning environments, however, is not at the basis of programming in primary schools. It is reasonable to suggest that, for many children in the early years of school, learning via sensory experience will still be their preferred way of gaining understandings of their world, particularly in the area of the physical world and its properties. In primary school learning outdoors is typically seen as an extension of the science curricula with the value of children’s hands on experience of the natural environment well documented (Titman 1994; Moore and Wong 1997; Malone and Tranter 2003). This play category combines these two recognized aspects of children’s play and learning. Whilst it may be expected that scientific/sensory play could occur in any playspace where natural features exist such as a garden area, sandpit, grassed or dirt surfaces, trees and shrubs, water or rocks, in fact it could occur in any part of the playground. It could occur anywhere that offers sensory experiences including sounds of water and birds, fragrances of earth and vegetation, views, wind around obstacles, opportunities to feel and taste, metal and wooden structures, cement or asphalt surfaces.

Van Gils (2005) says that through sensory experiences, children are trying to understand and comprehend physics. He explains that a child who understands the properties of sand can build a castle. It is important to look for evidence of this type of play in the playground in order to understand whether children engage in this play across all age groups and both genders, whether certain types of playspaces facilitate this play more than others and whether this category of play is evident in all playgrounds.

Illicit

This category of play is any play which breaks playground rules. It could include any type of play in an area which is out of bounds, for example imaginary play in a garden area. It might also be using fixed or loose equipment in ways which break playground rules, such as climbing up slides or throwing sand or sticks. It may be that children are willing to break playground rules in order to engage in some play activities. Opie and Opie (1980) suggested that children’s play is not always innocent and that for many generations has survived the interference of adults. This category of play is important in this study because understandings of the degree of risk children are willing to take in order to satisfy their play needs can be observed. It will also be interesting to observe whether children have strategies in place to avoid detection by supervising
teachers. Another important issue in playgrounds is the perception of adults of the value of different types of play and of play in general. By observing children engaged in illicit play, a better understanding of children’s play needs may be gained. It will also become evident whether or not playgrounds are meeting all the play needs of children or whether in fact, children have to break playground rules in order to engage in the play of their choice.

Rough and Tumble play

This category of play is frequently confused with fighting and therefore often banned in school playgrounds. In order to separate rough and tumble from fighting, Blurton-Jones (1967) described seven movement patterns which characterize rough and tumble play: running; chasing and fleeing; wrestling; jumping up and down with both feet together; beating at each other with an open hand without actually hitting; beating at each other with an object without actually hitting; laughing. She adds that falling seems to be a regular part of this behaviour also. Humphreys and Smith (1987) importantly discussed the lack of psychological attention rough and tumble play has received. They investigated the distinction between this type of play and real fighting and also the distinction according to gender and age groups with regard to this play. They concluded that this play was originally how children learned the skills of fighting and that this was no longer a necessary skill for survival of the human species, it was nevertheless still enjoyed by children. In the USA Pellegrini (1989) observed the rough and tumble play of children in grades K, 2 and 4 during playground recess breaks. Results suggested that rough and tumble play varied according to the gender of the child and playground location. It accounted for 11% of playground behaviours, aggression rarely occurring. Rough and tumble was found to lead to games with rules and to be positively correlated, for boys, with social competence. Pellegrini also found that children neglected by their peers were less successful that popular children at discriminating between serious fighting and rough and tumble play. Smith and Boulton (1990) describe the benefits for children of rough and tumble play as forming and maintaining friendships, opportunity to improve hierarchical ranking and development of social skills. These findings show how important it is that playgrounds not only cater for this type of play but view it as an indicator of social adjustment. Psychologists Bjorklund and Brown (1998) propose that humans have evolved a special sensitivity to certain types of social information during rough and tumble play that facilitates social cognition.
Evidence of a negative view of rough and tumble play can be found in research. It is a common focus for supervising teachers to reprimand children for rough play and warn that they might get injured. One reason for this attention suggested by Sutton-Smith (1994) is that it may be because the majority of playground supervision is conducted by females and that this typically male behaviour of rough and tumble play is seen as aggression. It is important to observe whether or not this type of play is common in the playgrounds in this study, whether it is predominately engaged in by boys and whether the benefits are understood by teachers.

2.1.5 Play in educational settings

All the categories of play listed previously can and often do involve physical activity. The cognitive benefits of physical play are described as providing a break from demanding intellectual tasks, and are hypothesized to be related to gender differences in spatial cognition (Bjorkland and Brown, 1998). The value of physically active play is discussed by Pellegrini and Smith (1998) who note as well as the cardio-vascular benefits, there are social and cognitive benefits also. In addition Sallis and Patrick (1994) describe the psychological benefits from physical activity for children as well as setting good patterns which will continue in later life. Bailey (2000) describes the value of physical exercise for the long term viability of the skeleton, saying that vigorous physical activity involving weight bearing is needed for bone growth. Ironically, however, in educational settings, play in the playground is not often valued to the same degree as work in the classroom and yet it has a well researched place in the holistic learning of children in school.

Many early childhood educators believe that children are constructors of their own knowledge. A constructivist view of learning means that children build knowledge and skills through a slow and continuous process of construction (Levin, 1996). Children actively explore their world, building on what they know, developing new understandings and skills. Levin (1996) suggests that as children play and explore, they encounter new and unexpected things which challenge them. According to Levin, the play process, which is an integral part of learning and development, involves the following steps:

- playing with what is already mastered and known;
- encountering an interesting problem to solve during play;
• solving or mastering the problem in play;
• having a new concept or skill to work on in play.

The Early Childhood perspective is that all types of play are equally important for optimal child development and teachers working in this field, plan both the indoor and the outdoor environment to encourage opportunities for all types of play. Play provides a mechanism for allowing children to move from what they already know and can master to more advanced knowledge. It allows children to control what happens and use what they know in their own unique ways to further their understandings and development (Levin 1996). The constructivist theorists apply their theory to all aspects of development through play. They believe that a child’s social development grows through interaction with their peers where they build their social understandings and relationships, to each new situation, bringing what they already know about being with others. Levin (1996) believes that when children engage in rich and meaningful play, they can exercise judgement, get to know and enjoy their power, and experience autonomy, mastery and competence. If they are unable to experience these emotions, Levin believes their emotional development will be jeopardised. Cognitive development is enhanced via play opportunities also, according to the constructivists. Play provides opportunities for symbolic and conceptual play. The cognitive skills which children learn to use as they play are necessary prerequisites for later academic learning (Levin 1996). As children persist in problem solving, they become creative thinkers, problem solvers and risk takers. Constructivists believe that play requiring active use of the body enables children to build their fine and gross motor control, enabling them to gain more and more control over their bodies. Children will practice the motor skills they have mastered and encounter new challenges requiring new skills, which are in turn mastered through further play. Children learn through relating space to their own body and movement, engaging large and fine motor skills as well as cognition (Olwig, 1990). Other early childhood educators who follow a developmental approach to children’s learning believe that play is a developmental activity where children move through a series of stages and along the way, discover their identity in relation to others. Advocates of this theoretical approach also believe that play has a positive impact on the learning of the young child. Jennings (1993) maintains that children who are able to play will have more resources to draw on, both in childhood and adult life. Within this framework, dramatic play is seen as an important coping mechanism that allows children to process material that they do not
understand and put it in a context that makes sense to them. It can provide a playful
space where life can be experimented with and choices explored.

The value of play to the learning process has not been entrenched as widely within the
primary school setting as in early childhood contexts although there are some strong
advocates for its inclusion. As previously mentioned, early formal schooling consisted
of rote learning and harsh discipline. If play is defined as intrinsically motivated,
children who are directed will find it difficult to incorporate play into their classroom
practices where there is an emphasis on procedure, timetabling and order. In Australia
today play at school is widely accepted in the outdoor environment but not within
classrooms. Children come to school to work, not to play. Evans (2003) describes this
phenomenon as the undervaluing of play by adults. Children have recess breaks from
the classroom which they spend in the playground. Generally there is a thirty minute
break during the morning and a sixty minute break at lunchtime. Some classroom
activities which claim to be play based may in fact be based on activities which are
seen during children’s play but when artificially initiated, may not be play as defined for
this study. In general educators see classrooms as more important learning
environments than the playground and this has been the case since schools were first
built in Australia. Government funding for classroom programs in the areas of Literacy
and Numeracy is plentiful compared with funding for play based learning in the
playground. Today there is an increased awareness of the outdoor environment and
schools often employ landscape architects to design the playground. Specialty
designers of play equipment supply fixed structures to schools. With increased
attention to the playground of primary schools, are the play needs of children being
met better today than in the past? Is the chief motivation for designed outdoor areas in
schools the play needs of children or aesthetics which are pleasing to adults? These
concerns have been addressed in studies by Rivkin (1990, 1995), Titman (1994),
Moore and Wong (1997).

Blatchford and Sumpner (1998) surveyed 6% of British schools, both primary and
secondary, and found that mostly recess breaks were viewed as problematic.
Researchers have encouraged schools to understand the importance of play as part of
the curriculum. Promoting the value of play in schools, Wortham (1985) said that rather
than categorizing the domains of development of children, there are advantages in
being more holistic, “As a child plays all facets of development are enhanced. Motor,
cognitive and socio-emotional development are all increased as the child participates
in play experiences. The child develops flexibility through play. As children engage in
play, arousal, desire for variety and the need for competence all come into focus” (pp. 5-6). Evans (1995b, 1997) has consistently warned that it is the undervaluing of play by adults which is the cause of changes in attitudes towards the importance of recess in schools. This view is supported by Van Gils (2005) who said that play cannot be reduced to games, it follows a process of ambition, trials, fun and repetition. He said that play is learning for life and is related to curiosity, exploration and activity. This holistic approach to education is worthy of active promotion in schools today.

Play in the outdoor environment at schools was also encouraged by Pellegrini and Davis (1993), who stated that during outdoor play valuable social skills can be learned and practiced and in turn these will enhance the cognitive abilities of children in other areas. Children on the playground, through social interaction with peers, are learning skills which are transferred to the classroom, this being consistent with Piaget’s (1965) notions of the facilitative effects of peer interaction on cognition. Another strong advocate of outdoor play in school is Rivkin (1995) who stated that, “education is better when it is not limited to classrooms and better when play undergirds it…Teachers of young children, with their historical commitment to caring for the whole child, should be among those who lead the way to better play spaces everywhere that children are-schools.” (p. 81). Rivkin believed that we must foster our next generation of environmentally aware adults by allowing children to experience the outdoor environment and encourage their interest in it. She also explained that the playground offers endless opportunities for open ended questions that help children think through problems. These views are supported by Davies (1997) who noted that opportunities for play in the outdoor environment may enable children to experience the mastery and control over their world, something which may be increasingly rare in contemporary society where children’s lives appear to be becoming more organized by adults supporting the views of Elkind (1989) mentioned earlier. She also indicated the importance of professional development for teachers which highlighted the special significance freedom in outdoor settings can have in young children’s developing motivational and affective orientations to learning.

Another researcher who has described play at recess in schools as essential is Jambor (1999) who believed that recess sets the occasion for play and subsequent social encounters that influence and nurture all other areas of development. Jambor described recess as an important counter to rigorous academic curricula and expectations for on-task behaviour. His view was that recess provides balance in the school day, supporting the views of Davies (1997) explained earlier, who argued that
young children are self-motivated, active learners and that through direct experiences in their environments, and through their play, children extend their physical and socio-emotional development, and construct understandings of their world. Others have argued that breaks such as recess may be critical in fostering attention skills in children and thereby aiding academic achievement (Pellegrini and Bjorkland, 1996). This view has been supported by research with two fourth grade classes (Jarrett, et al. 1998) which concluded that those who are given a recess during the academic school day are more on task and focused, this translating in the classroom as more quality learning time. In addition, many researchers have found that, for most children, play is their favourite part of the school day (Blatchford, Creeser and Mooney, 1990; Evans, 1997; King 1987). If children describe recess as their favourite part of the school day, a time which rejuvenates for indoor class, then it is important to understand changes occurring there, especially if they may result in less recess time in schools.

The social benefits of recess have been found to be substantial. More complex social skills are first encountered and then developed in the playground. Schudel (2001) explains that many of the lessons we retain from childhood are learned on the playground. It’s where we first join a team, where we first stand up to bullies, where boys can be boys and girls can be girls and where solitary souls can find a quiet corner to gaze at a cloud on their own. This notion is supported by Pellegrini and Glickman (1989) who state that recess is one of the few times during the school day when children are free to exhibit a wide range of social competencies- sharing, cooperation, negative and passive language- in the context that they see as meaningful. Only at recess does the playground become one of the few places where children can actually define and enforce meaningful social interaction during the day. Without the opportunity to play at recess, children lose an important educational experience.

Another assessable result of children playing in the playground is the development of motor skills. “The physical benefits of play have been described for children in the middle and late childhood, important developmental changes occur in the skeletal system, the muscular system and motor skills...They need to be engaged in active rather than passive activities” (Santrock, 2001, pp.58-9). Motor skills are also developed during this active play (Bunker, 1991). Current concerns in Australia of childhood obesity may be, in part, a result of reduced time for children to engage in physical play in the school playground. In the USA, Clements (2005) reported a link between obesity and reduced physical play.
The benefits for social and cognitive development are again reinforced by Jambor (1999) who believes that the educational role of recess for both social and cognitive development is becoming increasingly clear. He says that children must function in both the social and cognitive domains if they are to successfully adapt to school and societal norms. This is practiced in the playground as children engage in a range of play types which involve many negotiations and other social skills. As concern about the elimination of recess in many schools grows, this is countered by the concerns for academic achievement and increased curriculum demands. Jambor (1999) says that education policy makers are so obsessed with academic attainment that they have eliminated or drastically reduced other activities which are important in children’s total growth, development and learning. He argues that curriculum is weighted too heavily towards cognitive development. Although his comments are aimed at schools in the USA, the same may be directed at Australian schools.

When children move from preschool to school, opportunities for play as a means of learning diminish. The only time children are relatively free to choose their own play activities is at recess breaks in the playground. Here they can not only choose what types of play they want to engage in but can also choose with whom they wish to play. Guidelines which control the amount of teaching time are given in The Victorian Government Schools Reference Guide (2002) which states that there must be 300 minutes of instruction time in the school day and hours of operation will be determined at the local school level. The focus is on class time and does not state that a certain amount of time should be allocated for recess breaks. The school policy making body is usually a school council consisting of the principal, staff representatives and parent representative. Are these adults aware of the importance of play for a child’s learning?

In Australian primary schools, children usually begin arriving from 8.30 am onwards and until the school bell rings to signify the start of the school day, children play in the school playground. Some schools now provide “Before School Care” programs for early arrivers. There is a mid-morning break, generally for 30 minutes and usually from 11.00 am to 11.30 am. Lunch break is usually for one hour, mostly between 1.00pm and 2.00pm. An afternoon recess time has been abandoned by most Australian primary schools (Evans, 1995a). Children are generally dismissed from class at 3.30 pm and although the majority leaves the school grounds immediately, some will remain to play in the playground while waiting for caregivers to arrive. A growing number of children are now remaining at school in an After School Care program where structured activities are provided.
In Australia, school principals are free to organise the daily timetable as they see fit. The importance of recess breaks can sometimes be overtaken by the need to accommodate specialist teachers and other timetabling issues. With the increase in reported cases of bullying (Evans, 2001), combined with an undervaluing of play by adults in general, could it be the case that in some schools outdoor recess is considered more trouble than its worth?

Primarily, recess is the right of every child. Article 31 of the United Nations Convention on Children’s Rights states that every child has the right to leisure time. Taking away recess, whether as a disciplinary measure or abolishing it in the name of work, infringes on that right (Clements, 2005). The need for physical activity has been explained by Tomporowski and Ellis (1988) who found that exercise increases attention to various tasks and vigorous playground behaviour increases children’s ability to focus on classroom tasks after recess. Pellegrini (1991, p.40) notes that children need to have a break from the classroom where they can mix with other children in a new environment. He says that after a recess break, children will then look at a return to the classroom as a novelty:

*Children need recess because they are temporarily bored with their immediate classroom environment. When they go outdoors for recess they seek novelty by interacting with different peers in different situations. But, when the novelty of the recess environment begins to wane, they again need to change. At this point, the classroom becomes a novelty and children actually pay close attention*, Pellegrini (1991, p.40).

In the USA, Pellegrini and Bjorklund, (1996) compared both immediate and deferred benefits of recess breaks. The strongest evidence supported the immediate benefit view, that recess maximizes children’s attention to classwork. This was supported by Jarrett et al (1998) who attempted to determine the effect of a recess break on classroom behaviour, specifically working, fidgeting and listlessness. A southern urban school district with a policy against recess granted permission for two grade 4 classes to have a recess break once a week so that subsequent classroom behaviours could be measured on recess and nonrecess days and could be compared. This study found that most of the children were more on task and less fidgety when they had recess. Sixty percent of the children, including five children with Attention Deficit
Disorder benefited from recess, displaying more attentive behaviours in class. This sits well with the surplus energy theory previously described and may be why many schools still include recess breaks in their day. The study does not however discuss what the children were doing while on recess breaks and the intrinsic benefits of ‘playing’. The focus is on the benefits of recess for later ‘on task’ behaviour.

Collaborative research from the USA and the UK promotes the positive educational value of recess breaks in schools (Pellegrini and Blatchford, 2002). Their recommendations were that it is crucial for academic achievement, peer relations and general school adjustment that recess breaks be facilitated. In both the UK and the USA there is concern with antisocial youth behaviour, particularly in school. They explain that many American politicians are calling for special programs to teach social skills. We suggest most children learn social skills by interaction with their peers in meaningful social situations, recess is one of them.

As previously mentioned Clements (2005) describes the importance of increasing the physical activity of children in the USA with 16% of children in the age group of 6-12 years classified as obese. She warns that with 40% of schools having eliminated recess, many children have little opportunity for physical activity in their lives and the increase in related disease such as high cholesterol and diabetes, may see a generation of children who will have a shorter average lifespan than their parents. Break time does not appear to be relaxing and restorative for teachers when they are required to supervise children in the playground and raises questions about how teachers perceive their role as teacher on yard duty and whether teachers enjoy their time in the playground.

2.1.6 Gender and play

When investigating children’s play it is important to know whether the gender of players influences the types of play children engage in because this has ramifications for allocation of space and equipment in playgrounds. If certain types of play are gender specific or are more often played by one gender, playground designers who are aware of this can ensure that there is a fair allocation of space to both genders in the school playground. Researchers who have studied play from the perspective of gender participation have found that in many instances boys and girls do choose
different play activities. Thorne (1993), who believes that gender is socially constructed, described the practices of children that uphold a sense of gender as an operational dichotomy. She discusses the formation of rival groups of “the boys” and “the girls” in the playground (p. 158). Thorne also found that boys control more space than girls and more often violate girls’ activities and treat girls as contaminating. Best et al. (1977) found a steady increase in gender stereotyping through primary school with children developing rigid views on what is appropriate for girls and boys. Thorne (1993) stated that violating gender related norms, such as play choices, can lead to negative reaction from peers. Eifermann (1971) found that games involving physical activity decrease and strategic games increase across the primary school years for boys, while the opposite is true for girls. In his findings on the types of building activities engaged in by boys and girls, Hart (1979) found that boys concentrate upon the structure of a cubby whereas girls concentrate almost entirely upon interior detail, which is often imaginatively modified. Gender differences in children’s play have been noted in other research also. Boys are more physically active than girls (Eaton and Enns, 1986). Given a choice, boys more than girls prefer to go outside at recess (Finnan, 1982; Lever, 1976; Blatchford et al. 1990). This may be because boys like the physical possibilities of the playground whereas girls do not or it may be as suggested by Birns and Stern glanz (1983) that girls prefer the indoors where they will not be disturbed. Boys from kindergarten through to early adolescence engage in more vigorous physical activity, such as rough and tumble play, than do girls (Finnan, 1982; Pellegrini, 1989a). From a social perspective Ladd (1983) found that for popular or average children in the playground, the play groups of boys were larger than girl groups. He noted that individual differences interact with broader societal norms to affect the way in which boys and girls play at recess. Pellegrini and Blatchford (2000) found in their study that there were differences in the recess play of boys and girls at 11 years. Girls were more likely than boys to play seeking games, pretending games and skipping games whereas football dominated the playground activities of boys. Pellegrini and Blatchford (2000) suggest that there may be gender bias by teachers in their observations of play, with female teachers being less tolerant of the physical play of boys. Pellegrini (1989a) noted that girls who engaged in physically vigorous play, including play-fighting, were considered to be anti-social by their teachers whereas the same was not true for boys. In the context of this study it will be interesting to see how these gender related findings previously described, relate to the three Melbourne school playgrounds being investigated. It will also be important to find whether there is variation between the three schools given their varied socio-economic status.
2.1.7 Risk and play

In the USA, Smith (1998) investigated what pedagogical sense we make of the riskiness of the playground and our reactions to it. He believed that as adults we should aim at guiding young children towards a position of being responsible themselves for consequences of their activity. He categorized risks as:

- physical - being exposed to injury;
- emotional - admitting fear or hurt, expressing anger, trusting others;
- social - being honest, trying your best, saying no, defending your rights, being open to the ways of other people;
- intellectual - asking questions, exploring new ideas, admitting error;
- financial – loaning things, starting a business.

He explains that any particular risk taken carries a mixture of these different valencies. These views emphasize the importance of promoting a range of risk taking by children in the playground because of potential for learning the life skills they need. The notion of adults protecting children from the dangers of risk taking stems from limited understanding of its benefits as outlined by Smith (1998).

This notion of valuing the learning gained when children take risks in their play has been also seen in the design work of Obana in Japan. Many Japanese educators appear to have recognized the benefits of encouraging children to engage in “risky” play. A growing number of progressive kindergartens have built playgrounds that include mini-assault courses with high wooden beams and wooden walls where the aim is to let children challenge themselves and find their limits (Obana, 1989). Obana believed that most playgrounds were too safety conscious and were giving children restrictive limits and his innovative designs reflected this.

Another example of playground design which encourages risk taking by children can be seen in Skudenseshavn primary school in Karmoy, Norway. Here a school playground was been built which encourages children to dice with danger and sees broken bones as a natural part of childhood. The Norwegian government has increased funding to develop similar schemes in local communities based on the
research of Asbjorn Flemmen who believes that there is an increasing culture of adult-led children’s play which is taking the excitement away. In Norway children are shown how to use knives as a tool in the woods, hunt for wild berries and light open fires (Flemmen, 2005). These playgrounds may be viewed as a response to the adventure playgrounds first established in Emdrup. The government safety regulations are for use in control of quality products. There is nothing in the guidelines which takes away from the force in children’s play. He argues that risks are part of human life and that by trying out dangerous situations children learn something extremely vital in finding the limits of their sensory motor capacity (Flemmen, 2005).

In an effort to increase understanding about balancing risk and safety, the European Play Safety Forum (EPSF) was established (Sutcliffe, 2005). The forum was designed to examine the issues around the balance between safety, risk and the opportunities for children to play. The membership was drawn from a wide range of organizations and individuals across Europe concerned about the issues of play and safety. The forum stated that while the need for prevention of irreversible injury and fatality remains, there is also a need to find and promote the appropriate balance between play value, safety and risk in order that the opportunity for and quality of play in Europe could be improved. Among their recommendations was the need to promote interesting and exciting playspaces through more flexible application of the rules relating to safety, thus encouraging children’s development. They also recommend that children be consulted about their perceptions concerning play and risk and the way in which adults are handling it (Sutcliffe, 2005). The idea of consulting children about the issues around balancing risk and safety in playgrounds is not a commonly expressed one in Australia. It is not uncommon to hear that children have been consulted around issues of design in playgrounds, but this is more likely to be associated with creative use of materials. As children are the players in playgrounds, it is probable they would make valuable contributions to discussions around safety.

A significant finding was presented from The National Children’s Bureau in the UK (Glendinning et al, 2001) who examined evidence surrounding accidents, risk and perception of risk management at adventure playgrounds in the London boroughs of Lambeth, Southwark and Lewisham in 2001. Rather than simply gathering statistics of injury in playgrounds, this study also looked for qualitative information. One hundred and seven children and 15 senior playworkers were interviewed as well as the collection of accident data from 13 adventure playgrounds and results suggested that there was a balance between the need to offer risk and the need to keep children safe.
from harm. Most concerns about the safety of children were met through guidance, training, planning and building risk assessments and thorough daily safety checks. Senior playworkers, children and parents generally thought that adventure playgrounds were successful in providing a play environment in which children could safely take risks. These findings are extremely important because they demonstrate the value of seeking a rich picture of the nature of playground experiences of children, rather than relying on statistical data alone.

The move away from extreme safety consciousness in playgrounds to playgrounds where children’s need to play are paramount, is only evident in isolated cases in the world. In Australia playground rules still focus on safety at all costs with immediate removal of equipment when a child is injured and the increasing enforcement of rules such as “no running” in response to what once would have been viewed as an expected playground accident. The result of these reactions is playgrounds which children view as boring (Evans, 2003).

2.1.8 The influences of local and international organisations promoting play

Some international governments and organizations implement policies and guidelines which indicate the importance they place on play for children’s learning in schools. Various organizations in the USA including the National Association of Elementary School Principals, the National Association for the Education of Young Children, and the American Association for the Child’s Right to Play support recess as an important component of a child’s physical and social development (Clements, 2005). In Germany the Children’s Charity of Germany was founded in 1980 to promote places for children to play and has a strong emphasis on the importance of play in school playgrounds (Van Gils, 2005). In Austria the Centre for Future Studies has selected “leisure” as a research focus and has described school playgrounds as an important focus (Flemmen, 2005).

In an attempt to promote the value of play and children’s right to play, the International Play Association (IPA) was founded in Denmark in 1961 (IPA Declaration of the Child’s Right to Play, IYC, 1979). It was established to promote play in all settings, including schools and had a strong focus on the importance of outdoor recess breaks in
schools. The IPA is nongovernmental and interdisciplinary organisation, embracing in membership persons of all professions working for or with children. The organization works closely with many international bodies and is recognized by the United Nations Economic and Social Council and by UNESCO and UNICEF as a nongovernmental organization with consultative status. The IPA endorsed the United Nations Convention on the Rights of the Child, particularly Article 31, which states that the child has a right to leisure, play, and participation in cultural and artistic activities. In over 25 states in the USA there are groups under the umbrella of IPA who advocate for recess breaks in the school day. As many as four out of ten schools nationwide and 80% of schools in Chicago, have decided there is no time for recess. Instead of romping in playgrounds, children are being channeled in to more classes in an effort to make their test scores rise on an ever-higher curve.

In Atlanta, recess has been abandoned altogether. New schools are being built without playgrounds (Schudel, 2001). This frightening prospect is one which would be a sad development in Australia.

The Australian representative for the IPA is The Playground and Recreation Association of Victoria (PRAV) and it is a non-profit, charitable organization established in 1913. It is committed to working with all sections of the community, including schools, to promote the value of play, collect, disseminate and exchange information about play and play environments, carry out research into the use of playgrounds and their value and encourage the better planning, design and development of play opportunities.

The Association for Childhood Education International (ACEI) is based in America and recognizes the need for children of all ages to play and affirms the essential role of play in children’s lives. The 1988 ACEI position statement on play, “Play: A Necessity for All Children” has been widely cited. Unfortunately the issues presented in 1988 remain unresolved today. In the latest position paper Isenberg and Quisenbury (2003) discuss the AECI’s beliefs about play, guiding principles and practices for play experiences and the AECI’s call to action.

Outdoor play provides many benefits for children…Playgrounds should include a sloping area, large sand areas and areas for digging. While climate may restrict some outdoor activity, playgrounds should be planned for utilization throughout the year. Water play should be encouraged…gardens and animals add an important dimension to children’s outdoor play activity…location of play areas near
classrooms permits props and play to move freely from one area to another. Outdoor play space should also include cubbyholes or spaces that can serve as role-game features...Outdoor play is significantly different from indoor play. The outdoor environment permits noise, movement and greater freedom with raw materials such as water, sand, dirt and construction materials. When challenging playground equipment is available, outdoor play offers children the opportunity to increase physical activity and thus develop muscle strength and coordination. Outdoor playtime and school recess should be provided in all programs for children of all ages and abilities (Isenberg and Quisenbury, 2003, Available at http://www.udel.edu/bateman/acei/playpaper.htm).

In the UK, The Birmingham Advisory and Support Service guidelines and framework for a play policy was compiled by the Early Years Advisory Team to support those schools wishing to write a policy for play. This document provides a comprehensive framework, headings, key questions and significant quotes about play. It reflects the aims and principles of the Curriculum Guidance for the Foundation Stage (Birmingham City Council Policy, 2002). Another British organization concerned about the status of outdoor play in primary schools is the Association of Teachers and Lecturers (ATL, 2000). They have highlighted the growing lack of appropriate outdoor play areas on school premises. A survey conducted by this organization in 2001 completed by 550 foundation stage workers, is a vital piece of evidence in understanding the effectiveness of government’s early years education policy. When asked in this survey which aspects of the foundation stage have been problematic, 61% identified “use of outdoor area” as inadequate. Findings indicated that there are clearly severe limitations on the availability of suitable outdoor areas for Britain’s schoolchildren to use.

Since 1990 in Britain Learning through Landscapes (LTL) alongside it's sister charity Grounds for Learning (GFL) in Scotland has helped schools across the UK to bring lasting improvements to the environmental quality and educational use of their grounds (Adams, 1993).

2.2 Playground design

Over the last century, landscape designers and architects have contributed to the innovations we now see in children's public playgrounds. The creative approaches to
design of both playspaces and play equipment for these public playgrounds have not always been reflected in school playground design. The reasons for this lack of transference are not certain, cost is probably a large contributor. However some ideas seen in public playgrounds have filtered through to school playgrounds and the influence of contemporary design in public playspaces should not be ignored in school playground design.

2.2.1 Historical perspectives of playground design

An early example of innovative playground design was seen in 1938 when sculptor Isamu Noguchi was commissioned to design play equipment for Ala Moana Park in Hawaii (Noguchi, 1968). He designed a multiple length swing with different rates of swing and a spiral slide but safety concerns of adults overrode the play potential and learning opportunities for children. Thought to be too dangerous, this design was scrapped and he subsequently designed a contoured playground made entirely of earth modulations. Exercise was to be derived automatically in running up and down the curved surfaces. He created areas of interest for hiding, for sliding, for games, including flowing water. In 1951, he was invited to design a playground for the United Nations. The model he created was hailed as the only creative step made in the field in decades:

A jungle gym is transformed into an enormous basket that encourages the most complex ascents and all but obviates falls. In other words, the playground, instead of telling the child what to do (swing here, climb there) becomes a place for endless exploration, of endless opportunity for changing play” (Noguchi, 1968, p.2).

The design was strongly criticized as dangerous and was never built. In 1961, having been commissioned to design a playground for Riverside Drive Park, New York, he lamented that “the idea of playgrounds as a sculptural landscape, natural to children, had never been realized (p.11).

In contrast the adventure playgrounds of Denmark did achieve a sculptural landscape natural to children but rather than being of adult design, they were the evolving creation of the children. This is very significant in our understanding of creating
playspaces for children that will truly satisfy their play needs. By investigating the play of children in the setting of adventure playgrounds, a clearer picture emerges which shows children as creative problem solvers with a wide range of capabilities. Importantly also, these adventure playgrounds enabled the adult world to see that children at play do not need to be constantly policed and governed by adult rules to stay safe.

As far as is known, the world’s first, planned, adventure playground was started in Emdrup outside Copenhagen during the German occupations in 1943. The architect was Sorenson and the first play leader was John Bertelsen who gave the playground a philosophy and kept it going long enough to attract international attention. Bertelsen believed “children’s play development was closely related to their environment and to adult’s and society’s attitudes towards play.” (Bertelsen in Bengston, 1972, p.19).

Emdrup adventure playground was 7000 square metres and had a daily patronage of 900 children. Once the children became confident that the playground was there when needed, the daily visits fell to between 200 and 400 children. Bertelsen saw his role as facilitator and he refused to teach the children anything, including games, but instead gave the children every opportunity to put their own plans into practice (Bertelsen in Bengston, 1972, p. 20). Bertelsen countered complaints from adults about the untidy appearance of the playground with the assertion that children’s play is not what adults see but what the child experiences. Franklin (2001), a researcher of the history of adventure playgrounds in Europe, said that fights were rare provided there were sufficient materials and possibilities for play. Accidents, particularly serious accidents, were rare at adventure playgrounds (Franklin, 2001).

In Britain, post World War 2, Lady Allen of Hurtwood told the world about adventure playgrounds and made the importance of play for children, a social issue (Allen of Hurtwood, Lady Marjorie, 1968). In 1955 an experimental adventure playground opened in Grimsby, London, like Emdrup, founded on the principles of free play. As with Emdrup, discipline as a problem, hardly existed at all. In 1962 The London Adventure Playground Association was set up to advance the understanding of the educational, social and welfare values of adventure playgrounds and to assist in the establishment of new ones. Their definition of an adventure playground is as follows:

…can best be described as a place where children are free to do many things that they cannot easily do elsewhere in our crowded urban society. In an adventure playground, which can be any size from one third of an acre to two and a half
acres, they can build houses, dens and climbing structures with waste materials, have bonfires, cook in the open, dig holes, garden or just play with earth, sand water and clay. The atmosphere is permissive and free, and this is especially attractive to children whose lives are otherwise much limited and restricted by lack of space and opportunity (Bengtsson, 1972, p.44).

After the end of the second world war, Dr Alfred Lederman, general secretary for the Swiss association for children and youth, visited Emdrup. As a result of aid work in Germany after the war he, like Lady Allen, was aware of children playing happily but dangerously on bombed sites overflowing with rubbish and building material. Traditional playgrounds where little that was unexpected ever happened must have seemed rather boring. In Germany the first adventure playground was built in 1967 and by 1971, seven more had been built in West Berlin alone. Descriptions of these playgrounds were fascinating, Bergtsson noted, “in spite of two world wars and an iron curtain, Berlin children are still playing cowboys and indians” (Bengtsson, 1972, pp.73-84).

If we are seeking playgrounds in which children are actively engaged in play during which they are developing a wide range of skills with minimal adult input, then the adventure playground movement cannot be ignored. The philosophy behind the adventure playground is that it must never attain a fixed form—the playground itself, together with each and every item in it, must continually lend itself to change and become an object for perpetual variation in shape. With this definition in mind, traditional playgrounds where everything they contain has been moulded and given form in advance, understandably limit the play experiences of children. In an environment where children can direct their own play and are encouraged to show initiative and perseverance, none of the concerns of accidents, bullying and boredom which we now encounter in school playgrounds were an issue. Another noticeable feature of these playgrounds was the perspective of the play leaders who did not appear to see their role as that of policing but focused on facilitating the play and learning of the children. Much can be taken from the philosophy of these adventure playgrounds and applied to primary school playgrounds. These adventure playgrounds provide many examples of positive outcomes for children, teachers and communities.

There are also many playground design lessons to be learned from the work of Dutch designer Aldo Van Eyck. He promoted children’s play, by adapting existing buildings
and spaces in new and innovative ways to create playspaces. Aldo Van Eyck became world famous for his design of the Municipal Orphanage playground in Amsterdam. Between 1947 and 1978 he designed 730 playgrounds in the city. He incorporated existing elements such as walls and window frames in his designs and also designed fixed equipment such as chutes, tumbling bars and hemispheric climbing frames (Indepth Art News, 2002). Children’s use of unique play features was described by Hartle (1996), Brown, Sutterby and Thornton (2001) and Armitage (2001) who all described their use in the development of high level pretend play activities. These features had not been designed for play purposes however children were able to see their potential. Perhaps, given the opportunity at the design stage of playgrounds, children would suggest possibilities of unique features in the playgrounds they are familiar with, for innovative use in their play. Brown, Sutterby and Thornton (2001) suggest that the selection of unique features for children’s play depends on the imaginations of the children on the playground. Armitage (2001) found that children would select features like gates and fences for their imaginative games. These unique features would be abstract enough to allow children to adapt them to their games, while at the same time they suggested certain uses as children utilized fences for jails and an old furnace door as the doorway to the witch’s house. Importantly, when considering the design of playgrounds in primary schools, consideration should be given to unique play features, as described above, found both incidentally and also those which may be created by designers as was a feature of Van Eyck’s work.

By considering issues around school playground design as described in other parts of the world, common issues may emerge which can inform our understandings. Outdoor school environments in Japan are described as predictably alike (Stine, 1997). There is a sameness in design whether in the rural countryside, the remote mountains or in the busy urban areas, school yards have a few small trees, very limited but similar fixed metal climbing equipment, open expanses of dirt and sand, an absence of cement, asphalt, fencing and grass but accessible water areas. Most schools, no matter what age group they serve, contain outside swimming pools, vegetable and flower gardens. Dimensions of school environments for young children seem to include an emphasis on nature, opportunities for physical challenge, clarity through consistent markers and an arrangement of spatial openness (Stine 1997). In Australia, the same lack of contextualizing playgrounds within their community is often observed. In urban environments such as Melbourne, many primary school playgrounds contain colourful, prefabricated play equipment, asphalt surfaces and if room permits, a grassed oval.
The Canadian Biodiversity Institute (2005) describes Canadian school playgrounds as being typically barren, windswept rectangles of asphalt and grass. Over the past four years, the Institute has facilitated hundreds of in-class brainstorming sessions and listened to thousands of students talk about their school grounds. The results showed that the design and management of schoolgrounds unquestionably affects the behaviour, happiness and health of the children who spend time in them. Students described boredom due to unappealing playspaces and lack of equipment as a common problem. Mirroring the changing conditions described by Evans (1997) in Australian primary school playgrounds, Canadian students also described restrictive rules as a significant factor leading to unacceptable playground behaviours. The wide range of needs identified by children during the surveys are mainly ignored or prohibited by the design of the grounds and their management (Canadian Biodiversity Institute, 2005). It would be interesting to broadly survey Australian school children on a national level, to identify their ideas for playground design and management and hopefully to use that information to inform policy.

In Germany, government policy is focused on promoting children who are viewed as a sustainable long term investment. The Children’s Charity of Germany was established in 1980 to promote places for children to play. In Germany play is seen as a way to link generations and many areas are designed to welcome both children and adults. The innovative work of Schaffer (2005) makes this philosophy a reality resulting in playgrounds that are designed, created and maintained by all stakeholders. Shaffer’s playgrounds are natural environments which value and utilize the materials available, often in innovative ways created by children. There are lessons here for the Australian context which could promote this intergenerational link via school playgrounds at the same time promoting the natural environment to children. The Australian government has taken a different approach to raising environmental awareness in children. They have focused on improving teacher education and changing school curriculum. Popp (2005) describes radical reform in school design and teacher education in Austria where school curriculum now focuses on learning for life not just learning a profession. All students must learn about leisure which is a large part of adult time segments in Austria. The Centre for Future Studies has selected “leisure” as a research focus and play is a valued component of children’s life. Both Germany and Austria demonstrate the possibilities for children’s play that arise when it is valued and promoted at a national level by government.
In stark contrast Neto (2005) describes the changes occurring in Portugal in recent years which see increased focus on formal school curriculum and increased traffic in cities with higher levels of protection and security. Neto states that the number of free play spaces for children have declined and children’s lives have become increasingly hectic as they are constantly engaged in adult driven activities. In addition recess breaks in schools are becoming less common. Neto recommends new strategies for working with families which emphasize the importance of free play in the lives of children, echoing the views of Evans (2001) and Malone and Tranter (2003) who have described the undervaluing of play by adults in Australia as a very significant and damaging factor.

Pellegrini (1995) explains that one of the first studies of children’s playground behavior was conducted by a group of environmental psychologists in 1974. This was the pioneering study in the field, even though it examined neighbourhood, not school, playgrounds. In this report, three types of playground environments were compared: traditional, contemporary and adventure playgrounds. Traditional playgrounds are probably the most familiar to us; they consist of fixed structures, such as swings, seesaws, and jungle gyms, standing on asphalt surfaces. Contemporary playgrounds are aesthetically pleasing to look at (to adults at least), for they are often designed by architects. They are typically composed of stone, culverts, railroad sleepers, and the like. Adventure playgrounds are composed of a variety of materials that children can use to build their own play environments.

Not surprisingly, Hayward and colleagues found different playground types were related to different play behaviours. This is supported today by Malone and Tranter (2003) who note that interesting and diverse spaces increase the intensity of play and the range of play behaviours. The school playground in this way offers a number of affordances. The affordance of an environment is the measure of its capacity to respond and compliment the child’s development. Gibson describes affordances as ecological resources from a functional point of view (Gibson, 1979 in Malone and Tranter, 2003). Small places where children can hide are particularly valuable for imaginative play and solitude (Kirkby 1984, Moore and Wong 1997, Stine 1997). Stine (1997) identifies the value of perching places as does Hart (1979). Appleton (1996) also discusses the pleasure children have in places that offer the ability to see but not be seen.
The environmental features of the playground have the potential to be used in various ways, influenced by the current needs of the children. A study by Moore and Wong (1997) found that after replacing part of the asphalt playground with natural features, the play of the children took on a more positive focus and teachers began to use this part of the playground for outdoor lessons.

In 1966 a playground closely based on the “adventure” model started in Norway, was established in Boston and was closely studied by Robin Moore who noted that:

*The most important observation in terms of age was that it bore little relation to physical ability, to courage in particular-as well as spills. A six year old girl would, for example, climb up a tower without a second thought, while an eleven-year-old boy would be scared and unable to take the same route. This observation has many implications for design, such as the non-segregation of different age groups* (in Bengtsson 1972, p.151).

Bengtsson (1972) when discussing the need for adventure playgrounds in city areas with high-density housing, makes the point, “the frustration engendered by a barren and unyielding environment during childhood…is a far more serious matter and may lead in the end to juvenile delinquency, aggression, alienation, drug taking, etc…the play environment must meet the child’s urge to explore, test and experiment” (p.23). This is particularly relevant in Australia’s urban environment today where children do often live in the barren landscapes described by Bengtsson. While there are no playgrounds in Melbourne which would fit the definition of an adventure playground as understood by Bengtsson, the play needs of children living in the urban landscape will remain. Again the need for primary school playgrounds that will meet some of these play needs increases in direct relation to the increasing numbers of children in the urban landscape whose only opportunity to play outdoors is during recess breaks at school.

Designers of playspaces and playgrounds need to consider the individual, cultural and social needs of children and adults in order to create environments which create imaginative play opportunities outdoors (David and Weinstein, 1987).
2.2.2 Opportunities to make changes

School playgrounds do not appear to encourage children to actively make changes to their environment. Once designed and constructed it seems that the maintenance of the original aesthetic is important to the adults in charge. Regular tidying of the playground and a discouragement of children’s adjustments to features may be seen as a priority of schools. The desire of children to create and be in control of their environment may not be acknowledged as important however it has been found to be a strong motivation of children at play. Children need to create and change their environments as this process is empowering (Hart 1979; Moore 1986; Stine 1997). As has been previously discussed, loose objects and materials in the environment give the added opportunity for experimentation and creativity (Nicholson, 1971). These possibilities were most evident in the adventure playgrounds of Emdrup where children’s evolving design and construction was the central theme (Bengtsson, 1972). Here children were engaged and absorbed in their play, requiring minimum input from adults.

Children build personal connections with space when they have opportunities to claim it as their own. This can be incorporated with the inclusion of meaning-laden found objects, creation of “personal nooks and crannies” and participation in community gatherings that become rituals (Moore and Wong, 1997). This was also recognized by Hart (1979) when he described the ownership of cubbies constructed by children. The building of cubbies does not appear to be encouraged in school playgrounds today where visibility of all children combined with the need for tidiness, seems to be important for supervision.

2.2.3 Redesigning existing playgrounds

Many examples of school playgrounds being redesigned and the subsequent impact on children’s play are documented today. These show that even though existing playgrounds may be viewed by many as barren landscapes, they can be changed to become environments which promote children’s play.
In the mid-1980s a crusade to improve the quality of school grounds was initiated in Britain under the Learning through Landscapes programme. Word of its remarkable success spread across the Channel to Europe, and rapidly fanned out across the world to grow into an international movement. This movement aims to educate about the need to restore the Earth to health and about reconnecting with and learning to work in cooperation with the natural world.

The Edible Schoolyard is an excellent example of a concerned entrepreneur’s partnering with a school to transform its landscape and to integrate experiences with curriculum. A once unused acre of asphalt at Martin Luther King Jr. Middle School in Berkley, California, now flourishes with organic fruits and vegetables that enrich the minds and bodies of 900 students. This initiative was instigated by a concerned local restaurateur concerned with the derelict condition of the space (Klingman, 1998). The result was the involvement of the children in the creation and maintenance of the garden in conjunction with the local community.

The Boston Schoolyard Initiative, a six-year partnership between the City of Boston and a collaboration of 11 local foundations, is revitalizing neglected schoolyards and communities. It is a model for promoting community driven, sustainable development, environmental stewardship, responsible public policy and outdoor experiential education in Boston public Schools (Meyer, 1998).

Hart (1992) suggests that in some playground design projects, it is possible that the inclusion of children in the process may be tokenistic rather than giving them a genuine involvement. Importantly, Hart has developed a hierarchy of children’s involvement which illustrates the varying degrees of participation. Hart’s (1992, 1997) model defines eight levels of children’s participation in environmental projects:

- Child-initiated, shared decisions with adults.
- Child-initiated and child-directed.
- Adult-initiated, shared decisions with adults.
- Consulted and informed.
- Assigned but informed (social mobilization).
- Tokenism.
- Decoration.
- Manipulation.
He also notes that in all these levels, a small group of children may be viewed by adults as representing a larger group without having undergone a representative process. Hart’s model is valuable in developing and critiquing approaches for children’s participation in the design process. Hart provides a valuable framework for relating activities to children’s developmental stages and issues of cooperative learning (1997). Among the stages he notes that between ages eight and eleven, children tend to be enthusiastic participants and take on group work in a collaborative manner. He describes the social benefits of this group approach as including building a sense of group identity, social cooperation and democratic development. Within mixed age groups he notes also the potential for peer learning and modeled learning.

An example of this is given by Rivkin (1995) who describes a conversation about the redesigning of an American school playground. The children were interviewed about what they would like included and listed a pond, a spiral slide or said they didn’t know, then promptly ran to climb on a honeysuckle shrub at the edge of the property. A comment from a parent about the suitability of the shrub for climbing, brought the response from the playground designer that if it was to be allowed to remain, it couldn’t be included on the site plan because, “we might get sued”(p. 11). Rivkin comments that it is recognized to be desirable today for all stakeholders to be included in playground design; however she questions whether this happens. Rivkin (1995) suggests committees simply select a fixed piece of equipment from a catalogue. With high levels of participation by changing children, the design and redesign of school cyclical, because the benefits, as listed by Hart, would enhance the whole school environment.

2.2.4 Planning school playgrounds

In addition to involving children in a meaningful way in the design process, Rivkin (1995) expresses the view that school staff should also be involved in playground design for optimum results,

*as we become more aware of how much children need and benefit from outdoor play and learning and if neighbourhood conditions for children’s play continue to decline, teachers and principals may engage in more active roles.*
They know their children, know the value of play, and know what works for curriculum (p. 31).

Importantly the adult perceptions of appealing landscapes may not always be in agreement with children’s idea of beauty but in a design process involving both children and teachers, compromises could be negotiated and the needs of both groups more satisfactorily met. Olwig (1990) notes that for children beauty is not simply experienced as a visual composition, but as a setting that engages all the senses, particularly at the detailed, close to the ground scale. This is supported by Titman’s (1994) discussion about the “hidden curriculum” of schools. She noted that children believed that asphalt and concrete playgrounds were a measure of the low worth of the school and of themselves as part of it. Importantly also, teachers use the playground when they are supervising and, if the playgrounds were appealing to them, may actually spend time there during recess breaks by choice.

Including the wider community in the design, construction and maintenance of school playgrounds results in each playground being contextualised within its community, giving a sense of ownership to a wider range of stakeholders. Like Moore and Wong (1997) architect and educator Taylor (1993) advocates and involves children as key participants in the design process of their school playgrounds and includes the wider community also. By including the wider community, a broader set of skills often becomes available. Schaffer’s (2005) German playground designs involve children at the design stage by encouraging them to build models, often in the sand or dirt, of the playspaces they desire. These designs are then transferred professionally by draftsmen and are incorporated with the suggestions of teachers and other interested adults. The playgrounds are built together by children, teachers, parents and friends and are always unique in design to specific communities. Importantly, the design and construction does not complete the process as the playground requires maintenance also. The same stakeholders can become participants in this process also. Olwig (1990) extended this by saying that children should not only be involved throughout the construction process but should also participate in sustaining the landscape.
### 2.2.5 Types of playground equipment

Much of the research indicates that the equipment provided in primary school playgrounds does little to enhance play. In addition to this, loose objects, which may provide many play opportunities, are mostly seen as undesirable in the school playground. Nicholson’s (1971) theory of loose parts states that in any environment both the degree of inventiveness and creativity, and the possibility of discovery, are directly related and proportional to the availability of loose objects, e.g., stones, sticks, leaves, or pipes which children can manipulate in their play. School playgrounds are usually devoid of loose objects such as those described by Nicholson, as these are often seen as untidy or dangerous and if present are cleaned up promptly. Schaffer (2005) discussed the benefits of naturally occurring materials in playground design. He said that too often grass clippings and autumn leaves are removed from children’s playspaces when they would provide a range of opportunities for children’s play and learning. He described the need for materials that appeal to all of the senses, things children can touch, eat, smell, hear, and see. He said that the playgrounds he designs in Germany, often in urban environments are ecological, pedagogical and economical because they utilize the natural materials already available in preference to expensive manufactured play equipment.

A common feature of all primary school playgrounds is the fixed equipment which has changed in design over the years. The materials from which this equipment is built has also changed and today it is commonly brightly coloured tubular steel in a limited range of designs, often modular with a range of options for configuration. Aguilar in Frost and Sunderlind (1985), describes this type of fixed play equipment as a barrier to playfulness:

> Another environmental barrier is stabilized playground equipment which remains static and cannot be manipulated by the user. Traditional playground equipment such as slides, swings and exercise bars do little to stimulate the imagination. A high noise level can also affect playfulness, for the atmosphere or mood of an environment can be established by the type or volume of sound (p. 76).

In addition to this Brown, Sutterby and Thornton (2001) describe three design features of playground equipment which they believe unsuccessfully creates a play environment which encourages imaginative play. Brown et al. (2001) describe the
Novelty Era in playground design when designers attempt to promote imaginative play by designing structures that are supposed to appeal to the imagination. They build equipment shaped like space ships, submarines, covered wagons and animals. These forms which tend to be overdefined, dictate meaning, which is the antithesis of the magical state of mind needed for imaginative play (Talbot and Frost, 1990). Brown et al (2001) noted that recently designers have begun to return to the designs of the novelty era. Using plastic moulding, it is now possible to manufacture trees, dinosaurs and pirate ships which, unlike their metallic predecessors, more closely approximate the objects they are meant to represent. This causes concern about the value of such designs for enhancing imaginative play for the same reasons as those outlined by Brown et al. In agreement, Ihn (1999) found that imaginative play was enhanced when loose parts were incorporated and that the shape of the play equipment alone was not enough to enhance imaginative play. Over many years designers and researchers have tried to influence the design of playgrounds and to increase the quality of manufactured playground equipment (Freidberg and Berkley, 1970; Hewes and Beckwith, 1974; Rivkin, 1990; Thompson, 1996; Frost, Wortham and Reifel, 2001).

Brown et al (2001) conclude that today the inclusion of unique features on playgrounds has generally been limited to activity panels, which are rarely used by children. They recommend that playground designers need to consider how grates, doorways and fences appeal to children as bases around which they can organize their play, a feature of the designs of Van Eyck in Holland in the mid 1900s. Utilizing existing features in the landscape as beginnings for designs of playspaces could also prove to be an economical approach. A detailed understanding of how children use particular equipment and playspaces would inform designers of fixed equipment. Not only would their focus be on safety issues but would also attempt to facilitate a wide range of play opportunities for children, increasing engagement of children in play and reducing inappropriate playground behaviours that arise due to boredom.

2.2.6 Types of playspaces

When designing playspaces in school playgrounds, issues around supervision may be a common consideration, with adults believing that visibility of children is important at all times (Titman, 1994). Another factor in schools with rapidly increasing enrolments would be the need to increase the number of classrooms, therefore reducing the
available outdoor area. If the positioning of school buildings usually precedes playground construction, there may be limited choice for the placement of fixed equipment. As the decisions regarding such placements are made by adults, it is likely that the perceptions of aesthetics may be different to those held by children. Huizinga (1949) discusses the importance of playspaces for the facilitating of children’s play:

All play moves and has its being within a playground marked off beforehand either materially or ideally, deliberately or as a matter of course. Just as there is no formal difference between play and ritual, so the consecrated spot cannot be formally distinguished from the playground. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc. all are in form and function, playgrounds, ie forbidden spots, isolated, hedged around, hallowed, within which special rules obtain...Play demands order, absolute and supreme. The least deviation from it spoils the games, robs it of its character and makes it worthless (p.10).

In the USA, Hart (1979) investigated children’s experience of place. Although this research was not conducted in a school setting it gave insight into children’s use of space for play and the types of spaces which they choose to play in. More specifically Hart found that ponds, trees and forbidden places such as quarries and sand piles were highly valued by children for their suitability for climbing and jumping. He also found that hiding places and lookout places are highly valued by children. Another finding was that children spend a lot of time alone quietly resting, watching or dabbling in sand or water. Such activities have been given little recognition in the planning of playgrounds. Hart also found that small patches of dirt throughout the town in his study were the most intensively used of all children’s playspaces. Boys commonly building large-scale places such as highway systems and towers whereas girls, unless playing with boys, usually built single homes and elaborated the interiors. Such playspaces are rarely found in school playgrounds, probably because of adult values.

Brown et al. (2001) stated that the influence of spatial arrangement in the play environment is especially important in that different spatial arrangements change how children think. Ihn (1999) found that children often preferred to play underneath a pirate ship play structure, choosing to use this space as a private gathering, resting and imaginative play area. Brown et al. (2001) argue that the closeness of play equipment can help the flow of imaginative play, while distance can hinder it. Frost (1992) agreed that the structures in the playground should be zoned into a relatively
compact but functional area to promote dramatic play. Frost explained that one of the reasons for this type of positioning of equipment was that dramatic play frequently has a mushrooming effect- as children join the dramatic play scenario, they entice other children to join, and the play spills over from one component to another. Importantly, when schools are considering allocation of space in the playground, consideration of the impact of arrangement of space and positioning of equipment on the play choices of children would result in a higher quality play environment.

In the UK, Armitage (2001) conducted 90 play audits across schools in the north of England in the 1990s and his aim was to learn what happens (in terms of play) within the school grounds, where it happens, who does it, and what it is called. This was done using a combination of observations, interviews, mapping exercises and general conversations with children and adults during playtimes and lunchtimes. His findings related to the consistency of use of playspaces over time by children. He also noted the continuous habit of adults in designing school playgrounds as large open squares or rectangles set away from school buildings. He said that this environment, devoid of access to nooks and crannies or other three dimensional features that might serve as defining boundaries, makes it difficult for children to define their own places and gain distance between different forms of play. He concluded that adults should support children’s play by providing an environment that caters for what children actually play as opposed to what they should or could play, or even what we think they play.

2.2.7 Children’s perceptions of their school playgrounds

The impacts of school landscapes on children’s lives are not trivial. The conditions of school playgrounds affect the learning and development of children and their time in the school playground is now often the most time children spend outdoors daily. School landscapes hold tremendous potential to enrich childhood experiences, integrate curricula, and foster community interaction. School sites need to be redefined as engaging environments for learning-places that celebrate nature and civic life (Johnson, 2000).

Titman (1994) conducted a qualitative study in the UK which sought the perspectives of children on the impact of their school ground environment. The results of this study
were particularly significant because they revealed the power of the environment on the children and showed the far reaching possibilities of changing an environment that is having a negative impact (Titman, 1994).

In her study, Titman asked children to view images of playgrounds and respond to each. She found that children read the elements of the playgrounds as signifiers in the following ways:

- Tarmac (asphalt): ugly, hard, dangerous, cheap.
- Grass: gentle, good for games, sitting, rolling, lying, contains hidden things.
- Trees: climbing, challenge, ever changing shape and colour, shade and shelter, living things.
- Flowers: aesthetic values, sensory, symbolic of a cared for school environment, children’s own gardens were symbolic of ownership of their playground.
- Mud and Sand: mud meant fun but also getting into trouble for being dirty, sand similar but sandpit a lesser version than sand at the beach.
- Ponds: symbolic of the living world, fascinating creatures, needs to be cared for.
- Bushes and Dens: usually out of bounds, places to hide-dens, the most highly valued features of the playground, privacy, the potential for ownership.
- Fixed Play Equipment: often boring, brightly colored equated with babyish.
- Furniture and Fixed Structures: exposed, vulnerable, children valued places to sit in rater than seats or benches to sit on. Shelters were good shade and protection from rain.
- Animals: nicer atmosphere, trust in children to care for animals, better environment, some children associated animals with danger, disease and bad smell.
- Litter, rubbish and vandalism: signifiers of neglect.

“Children read these messages and meanings from a range of signifiers which frame the cultural context of the environment” (Titman, 1994, p.63). These findings have implications for Australian primary school playgrounds and could inform design in a range of ways. This is supported by findings of the Canadian Biodiversity Institute who found that children notice everything about their schoolyard. In their view, signs of
neglect such as cracked paving, rusted and broken fences, sagging gates, peeling paint, bent basketball hoops, clogged drains, worn out grass, litter and graffiti and the lack of colour, shelter and comfort, all indicate adults’ lack of care for them. The children come to believe they are not worth anything better (Canadian Biodiversity Institute, 2005). This strongly agreed with Titman’s findings about the hidden curriculum and its impact on children. The hidden curriculum is the learning which takes place that is influenced by the environment and the symbolic representation within that environment.

Titman’s (1994) main findings about the Hidden Curriculum, are summarized below:

a. School grounds, by their design and the way they are managed, convey messages and meanings to children which influence their attitude and behaviour in a variety of ways.

b. Children read the messages and meaning from a range of signifiers which frame the cultural context of the environment. This constitutes the Hidden Curriculum of school grounds.

c. The Hidden Curriculum has considerable influence, in a range of subtle but significant ways, on the operation of all schools.

d. It is within the power of those who manage schools to determine the nature of the Hidden Curriculum of their school grounds. (Titman, 1994, p. 6)

Titman also acknowledged that the opportunities children have for outdoor play are diminishing in our urban societies and consequently the school playground environment has become more important as children lose their other outdoor play opportunities.

Moore and Wong (1997) described three domains of education that should be supported in the design of school landscapes in order to enhance the learning experiences of students:

- Informal education- encompassing all learning from a child’s daily experiences, of which play is a central quality.

- Formal education-characterized as the familiar context of a teacher presenting material to children in a class setting.
• Nonformal education-defined as a bridge between these two forms, where resource people may facilitate learning in non-classroom settings, such as natural areas and community facilities.

The solution to designing outdoor playspaces in schools which facilitate a wide range of play choices for children, may lie with the children themselves. In Canada it was found that children usually offer many sensible suggestions for making the school grounds healthier, safer and more child-appropriate (Canadian Biodiversity Institute, 2005). This supports Hart’s descriptions of the value of including children in the design process of their school grounds in a meaningful rather than tokenistic way (Hart, 1992). The work of Schaffer (2005) in Germany also supports the view that children’s contributions to the design, construction and maintenance of their playspaces improve the quality enormously.

2.3 Teacher supervision styles and the impact on children’s play

Research shows that in the outdoor environment, ideally teachers guide children to play safely and constructively, and extend children’s activities through suggestions or questions, sometimes participating with children to extend a play theme or conceptual understandings, sometimes redirecting to exploit incidental learning (Hildebrand, 1994). Often teachers also act as mediators, helping children to learn to solve problems on their own (Jones and Reynolds, 1992). In this role teachers can assist children to develop self-control and build self-esteem (Bredekamp, 1987). Scales (1987) recognized the value to the learning of social skills when children communicate with peers and adults during play. According to Evans (1990), in the Australian primary school playgrounds, many teachers said they would gladly do without the job of playground supervision. He found that for many teachers it was not a rewarding experience.

Although teacher involvement in play can enhance learning, research also notes that children need to engage in free play, alone and with peers, without interference from adults (Christie and Wardle, 1992). A most valuable example of this free play was in
the adventure playgrounds of Europe, previously described. In the adventure playgrounds established in London in the 1950s, the ratio between adults and children was often one adult to 60 or more children. Their role is described in Bengtsson (1972): “The primary job of every worker is to assist the children in everything they do and help them form relationships with adults. They are friends and advisors to the children—not authoritarian leaders” (p. 18). The notion of children in more stimulating playground environments having less behaviour problems is supported in a study by Moore (1974), who often helped to redesign uninspiring playgrounds. In their new environment, children got into less trouble and teachers were more positive about yard duty.

The need for teachers and children to take a break during recess is described by Davies (1997) who suggests it is not viewed as a space where learning and teaching takes place. The tendency for teachers to stand around watching children play, and only intervening when a safety hazard arises or when a child requires some form of assistance, appears to be a particular feature of teacher’s interpretation of their role in outdoor settings. There has been a strong tradition in education that the outdoor setting and, particularly, the school playground is merely a place for teachers to take a rest and for children to expend excess energy (Davies, 1997).

In his description of the New Zealand scene, Sutton-Smith (1981) says that from 1840 to 1890 there is increasing evidence of adult influence on children’s free time. He found that most teachers looked at the playground negatively or indifferently, but the arrival of gymnastics apparatus, cadet drill, physical training, and playground supervision gradually forced teachers to take a more active approach. He suggested that playground supervision arrived initially to protect the school property and to protect the children and that it was safety rather than educational issues which informed teacher supervision styles.

Blatchford (1989) explained that in the UK, the supervision of children in the school playground underwent an irreversible and major change. This began in the 1960s when teaching unions became concerned about what was seen as increasing requirement of teachers to do lunchtime duty. The 1987 School Teachers Pay and Conditions Document formally set out teachers’ duties, and quantified them in terms of “working time.” Blatchford (1989) explained that teachers no longer spend time with children during lunchbreaks as they once would but now use the time for a break from
children. In most UK schools children are now supervised by ancillary staff employed for that purpose. This situation has created its own set of problems with regard to training, involvement in policy making and behaviour management of children. If supervising staff are untrained they may act inappropriately in a way that will not promote and enhance the play and learning of children.

Evans'(1990) Australian study of playground supervision found that most teachers “refrained from intervening in any playground activity unless it was deemed essential to do so” and most teachers saw yard duty as an “obligation they would gladly do without”(p. 225). He also noted that teachers were unprepared for their role as playground supervisor, “Teachers were given no advice as to what they were expected to do while on duty other than the fact that their physical presence in the playground was required by the employing authorities. He found that individual teachers adopted varying styles of supervision” (Evans, 1990). A lack of confidence in managing situations involving conflict may contribute to their lack of enthusiasm for supervision. In a study of government schools in regional Victoria, Evans recommends that those responsible for supervision during recess need appropriate training to enable them to deal with behavioural problems that arise in the playground (Evans, 1997).

Sluckin (1981) found that teachers in his UK study had similar opinions and said that they “abhor” yard duty. Evans (1990) examined the occasions when teachers did intervene in children’s play. He looked at which children asked the teacher to intervene, for what reason, and what action the teacher took. He found that those children who constantly sought assistance from the teacher were those socially rejected by their peers.

Another area of concern for supervising teachers is their concern about children receiving injuries in playground accidents. The fear of litigation may well be paramount in their minds and may influence their responses to children engaging in risky play. Smith (1998) says that we must question the nature of our actions with children on playgrounds, and reflect especially on how we might help children as they encounter the riskiness of the playground. Removing all risk from children's lives has been rejected in the Japanese playgrounds where equipment is specifically designed to encourage risk taking. Risk taking was also an integral component of the adventure playgrounds of Europe where it was seen as crucial in the learning for life process.
Evans points out that one of the biggest hurdles we have to overcome is of lack of understanding of the importance of play in children’s growth and development (Evans, 2003). If teachers were more informed about the various types of play children engage in and the learning they experience through play, they would be in a better position to promote and encourage play in the playground. They may even feel more confident to participate in some play activities. Blatchford and Pellegrini (2000) noted that an unfriendly adult in the playground inhibits children’s play. Teachers who see the possibilities of the playground as a learning environment may feel more relaxed and confident in their supervision.

The purpose of this study is to gain a clearer understanding of what is impacting on children’s play in the primary school playground. Opie and Opie (1959) made a valid point when they blamed the generation gap as being responsible for the lack of understanding of the lives of children by adults throughout history. By asking children their views and listening to their voices, researchers can gain understandings of the play desires and designs in the minds of children regarding school playground from children's perspectives.

2.4 Overview of historical changes to school playgrounds in Australia

As pointed out by Blatchford and Sumpner (1998), the change to recess in schools needs to be seen alongside historical and cultural change. Maddern (1969) explained that since the earliest days of education in Australia, schools have changed over time, adapting to meet the needs of individual school communities and influenced by government educational policy. As outlined in the Report to the Victorian State Government in 1960, the policy of mandatory education for all children was groundbreaking in the British Empire. Free and compulsory education for children between the ages of six and fourteen years, was introduced in Australia in 1873, three years ahead of England. In the following three years, 600 new schools were established in Victoria. These schools and those built in following years, were constructed in a range of styles and materials, depending on the requirements and resources available. The specifications outlined by the Education Department were based on designs from the UK. School playgrounds were rarely mentioned in
historical accounts of education in Australia with the main focus being shared between the school buildings and the curriculum.

The need for an outdoor area surrounding the school buildings can be noticed in the following photos. In many of these photographs of early Australian schools, the classroom buildings stand in barren landscapes devoid of play equipment. Over time this outdoor area can be seen to have many uses, ranging from accommodation for horses ridden by children to school to outdoor classrooms. Photographs show that playgrounds in Australian primary schools of the early 1900s, were full of activity, often including gardens tended by students and small horse paddocks (Russell, 1994).

The following photographs illustrate the variation in schools that existed in the early years of schooling in Australia. Schools ranging from small one room rural schools to large, ornate schools built in more populated areas where the local community was able to afford financial contributions to the building. Today, the traditional style of playground previously described, can be commonly observed in schools.

![Figure 1 - Yackandandah School 1870](image)

*Reproduced with permission of the State Library of New South Wales.*

This photo taken in 1870 at Yackandah school in Victoria, shows one use of the playground during that era was the training of cadets. This was a common practice of the time, based on an English military tradition. Cadets practiced marching and other
drills and a large flat area was required for this. There appears to be no artificial surfacing in this playground and no play equipment is visible.

The depression of the 1890s restricted salaries and staffing and also the establishment of new schools. Imitations of overseas theories and practices were the major factors in explaining the events of Australian education from 1901-1914.

By the end of the 1890s, there was such a pressing disquiet about the future capacity of elementary education to meet demands for trained ability, that enquiries were instituted or reports prepared in most states (Cleverley & Lawrey, 1972).

Figure 2 - Class of children and teacher in outdoor lesson at Redcastle State School
La Trobe Picture Collection, State Library of Victoria.

Photographed in the 1890s, at Redcastle State School, is a class being conducted in the school grounds. Desks have been moved to the area and it is uncertain whether this lesson was being taught outdoors because of the pleasant climatic conditions or because the lesson content was environmental with examples readily available outdoors. This school ground appears to contain a garden and a pathway, indicating that it is an important part of the school.
Drawing, more object lessons, craft work and agriculture in elementary education were recommended in the Samuelson Report, published in 1882-4. Other additions suggested by the Cross Commission on the Elementary Education Acts included practical arithmetic, history, cookery, poetry and school books (Butts, 1955).

Figure 3 - A settler’s children going to school

La Trobe Picture Collection, State Library of Victoria.

This photo taken in the early 1900s depicts the common modes of transport to school, walking and on horseback. Because many children rode horses to school, facilities were required close to the school to accommodate the horses during the school day. Many rural schools had horse paddocks and inner city schools also had space to accommodate horses during school hours.
Links School at Geelong, shown here in 1910, newly built. It is evident that this building was an expensive building and the surrounds appear barren and of secondary concern to the building.

Figure 4 - Links School in Geelong, 1910
La Trobe Picture Collection, State Library of Victoria.

Figure 5 - Young girl sitting in a sandpit, 1910
La Trobe Picture Collection, State Library of Victoria.
This photograph taken in 1910 in a small rural school in Queensland shows a girl playing in a sandpit. This photo shows that sand and loose parts were provided for play in this school playground.

![Image of a school building with students](image)

**Figure 6 - Opening of new school at Cressy, 1913**

*La Trobe Picture Collection, State Library of Victoria.*

At the opening of this new school at Cressy, Victoria, in 1913, it is clear that the building is the focus. This photo shows no signs of play equipment or provision of playspaces. No trees, paths, or fences are visible.
This rural school in Gippsland, Victoria, was photographed in 1915. This is possibly the entire enrolment as the building appears to be one room only. There is a small number of students of varying ages and the space surrounding the building appears to be open and uncluttered.
The school in figure 8 is unknown however the picture was taken in 1914. The surface appears to be asphalt. The children are holding yard rulers which may indicate that they are engaged in a lesson where they are required to make measurements. Here the outdoor environment is possibly being used as a valued place for formal learning.

Figure 9 - Montessori system of education at Blackfriars School
La Trobe Picture Collection, State Library of Victoria.

Children gardening at this Montessori school in inner suburban Blackfriars in Sydney were photographed in 1914. The outdoor surface appears to be asphalt and the children are engaged in tending the garden.
Figure 10 - Outdoor Geography lesson in school yard. Jindalee Primary School. Map of world in dirt, with cut out ships and animals.
Reproduced with permission of the State Library of New South Wales.

This 1920 picture taken at Jindalee Primary School in NSW is described as an outdoor geography lesson with a map of the world in the dirt and cut out ships and animals. Again, the school grounds have been viewed as a valuable learning environment where students have been able to create a tangible model of the lesson content.
At Blackfriars School again, this time in 1923, this outdoor space is being used for a lesson involving physical activity and music, possibly dance. The shadows indicate that the weather is fine and sunny, possibly why the teachers chose this setting for the lesson.

In 1925 at Auburn Public School in NSW, children can been seen during a recess break in the playground. Most of the children are wearing hats and it is difficult to tell if
this is part of a uniform. Groups are gathered together but do not appear to be playing games with rules. The children near the base of the stairs may to be engaged in play of some kind. No fixed or loose play equipment is visible. All the students appear to be female. The focus here appears to be on having a break from work.

**Figure 13 - Play Centre: Sydney Harbour Trust School.**
*Reproduced with permission of the State Library of New South Wales.*

This photo at Sydney Harbour Trust School was taken between 1930-9. It shows a shelter shed in the background. These were included so that children could shelter there in unpleasant weather conditions to eat lunch and play.
Photographed in 1934 at Drummoyn Primary School, NSW, are boys during a physical culture class, a lesson being conducted in the outdoor environment. The surface of the playground is bitumen and no markings for other games are visible. This is either a boy’s school or the boys have been segregated for this activity. Primary school playgrounds were viewed as places where children’s abundant energy must be controlled, this was seen as necessary for moral training as for physical recreation (NSW National Education Reports, 1861 and 1864; quoted in Shaw 1980). E P Robson, an English architect whose work heavily influenced school designers in the second half of the last century, suggested that “boys should be isolated by a wall of six feet from girls…and boys should get the lion’s share of space” (Shaw 1980 p. 4).

Quoting from the NSW and Victorian Ministerial reports from 1861 and 1864, Shaw (1980, p.3) suggests that Herbert Spencer’s surplus energy theory coupled with the framework of chaste Victorian ethics of the time were the two major factors responsible for the asphalt and ironmongery installed in NSW and Victorian primary school playgrounds late 1800’s and early 1900’s in the name of play.

Drill-modeled on infantry drill with an army officer in charge, organized games, sports and physical training were considered to be the best activities for the “formation of
character.” Sanitation, durability and ease of supervision were also considered important, so surfaces such as tar and asphalt were recommended because they provided good drainage of playspaces (Cleverley & Lawrey, 1972).

Figure 15 – Kindergarten playground -
Reproduced with permission of the State Library of New South Wales.

As can be seen in this photograph, many types of play experiences have been catered for in the outdoor environment for children. This photograph does not look like a school playground such as those presented in this chapter but rather shows a focus on play. The above photograph of a 1955 kindergarten in NSW illustrates the effort made to create playspaces to facilitate a range of types of play in the outdoor environment.

The following photographs show a change in attitude to recess breaks. The focus in all of the following photographs is on play. Mostly games with rules have been photographed however, often in the background are large grassed areas where children could run.
Girls playing skippy have been photographed here at Wallsend Public School, NSW, in 1957. The playground surface is asphalt and the area where they are playing is shaded. There is a grassed area in the background.

Figure 16 - Wallsend South School
Reproduced with permission of the State Library of New south Wales.

Figure 17 - A.W.F. basketball match at Blakehurst Primary School
Reproduced with permission of the State Library of New South Wales.
In the photograph in figure 17, children are engaged in a game with rules, playing netball, on a hard court with painted lines, at Blakehurst Primary School, NSW, in 1964.

![Figure 17 - Blakehurst Primary School](image)

Figure 18 - Milsons Point Public School
Reproduced with permission of the State Library of New South Wales.

Here at Milson Point Public School in 1985 is an example of a piece of fixed equipment made of treated pine. A swinging bridge, tyres, a slide and swings are part of this type of construction. The undersurface is grass. Today most play equipment constructed of treated pine has been removed from school playgrounds and a soft fall surface such as tan bark is required.

![Figure 19 - Milsons Point Public School](image)

Figure 19 - Milsons Point Public School.
Reproduced with permission of the State Library of New South Wales.
Again at Milsons Point Public School in 1985, children can be seen playing hopscotch on an asphalt surface. They have either drawn the markings themselves or they have been painted there. Many schools at this time started to paint asphalt areas and some wall spaces with diagrams to encourage game playing.

Figure 20 - Milsons Point Public School.
Reproduced with permission of the State Library of New South Wales.

In 1985 at Milsons Point School is an example of the style of fixed play equipment made from tubular steel, which preceded the treated pine structures. This photo was taken prior to regulations requiring soft surfaces under such equipment. At this time, play was the focus, not public risk.
Brightly coloured modular equipment is popular in school playgrounds today. This example illustrates the common features of this style of design—slide, pole to slide down, small platforms, ladder, bridge and bead frame with soft undersurfacing.

2.4.1 Primary school playgrounds in the Australian context today

Historically the design of school playgrounds in Australia cannot be isolated from the functioning society of the time. As discussed earlier, Victorian attitudes dictated the design and functionality of Australia’s earliest urban school playgrounds. As the society developed and grew, changes could be observed in school playground design. The exact nature of these influences is beyond the scope of this research, however it is evident in the previous photos that school playgrounds took on increasing importance over time. This may now be a process in reverse. It is possible that Australian primary school playgrounds may be more frequently considered as more trouble that they are worth, a view found by Blatchford and Sumpner (1998) to be fairly common in schools Britain.
In Australia the government does not collect statistics on even the most basic characteristics of recess in schools such as its duration and proportion of the school day. Without such statistics an accurate picture of recess in Australian schools is difficult to achieve. Today in Australia each state and territory oversees its own education system. In Victoria, where this study was conducted, the government has issued guidelines for school playgrounds with one of the major contributors to this document being the Playground and Recreation Association of Victoria (Department of Education and Training, 2005). These guidelines were primarily written for principals, teachers and school council members with the intention of providing information which will aid in the formation of school playground policy at the local level. The guidelines aim to improve students’ safety, while reinforcing that the primary objective of play equipment lies in its value for play and adventure.

In Australia schools are required to ensure that all playgrounds comply not only with information in the Guidelines, but also with current Australian Standards, in particular, AS/NZS 4486.1:1997-Playgrounds and Playground Equipment. Part 1: Development, Installation, Inspection, Maintenance and Operation. This Standard is intended for use by designers, manufacturers and installers of playground equipment, as well as operators of the playground. This standard is designed to minimize the risk of injury to children using playgrounds by providing guidelines for siting and developing playgrounds, product information and requirements, instructions and operating procedures intended to support sound playground design, the selection of appropriate equipment and to minimize operational hazards.

Other standards referenced in AS/NZS 4486.1, 1997 or referencing playground equipment include:

- AS 4685(Set)-2004 Playground equipment including Parts 1-6.
- AS/NZS 4422:1996 Playground surfacing-Specifications, requirements and test methods, including Amendment No. 1, 5 May 1999.

These standards can be accessed at http://www.eduweb.vic.gov.au
Any new work or refurbishment of schools, including playgrounds, must also meet the requirements of the Department of Education and Training’s “Building Quality Standards Handbook” available at http://www.sofweb.vic.edu.au/facility/docResearch/index.htm

In May 2005 the Department of Human Services (DHS) released a statement regarding the use of Copper Chrome Arsenate (CCA) treated timber in school playgrounds based on the findings of the Australian Pesticides and Veterinary Medicines Authority (APVMA), the agency responsible for registering chemical products to make sure they are safe to public health and the environment. In this statement DHS said that in over 30 years of use, no cases of adverse health effects in children playing on or near CCA treated play equipment have been reported (APVMA, 2005). The APVMA did not recommend the removal of existing structures that are in good condition.

The Department of Education and Training (DEET) recommends that schools have an effective Playground Safety Management System to ensure that risks and injuries are kept to a minimum. With this in mind, DEET recommends that schools appoint an appropriately skilled person to act as playground coordinator who would keep accurate records of play equipment and would ensure that playground areas are functional and in safe condition (DEET, 2005, Section 2.1).

Choice of activities, play areas and play equipment is considered in Guidelines for School Playgrounds (DEET, 2005, Section 3.3). When listing the types of playspaces which should be available to children in schools, this document recommends firstly areas to accommodate games with rules and does also include areas which could accommodate imaginative play and scientific/sensory play. As part of the suggestion to provide sand play areas, dirt and water there is also mention of play with loose materials. This document also acknowledges that children will use doorways and steps as playspaces and suggests the safety of such be considered.

Section 3.4 Choosing equipment recommends that students be consulted when playground equipment is being chosen to understand their views and preferences. The difficulties of designing a process which represents the voice of the whole student population is described by Hart (1992). However schools who are determined to overcome such difficulties may choose to also include the students in the design, construction and maintenance of playspaces (Hart,
1992). Section 3.9 Design and Construction does not mention the possibility of children participating in any way.

Section 3.13.1 Regular Visual Inspection recommends that regular visual inspections of the equipment and the area be carried out every school day and maintenance inspections be carried out every three months. A comprehensive annual inspection is recommended and an audit supplied (Section 4.1.3).

Section 4.2.1 Supervision roster (or yard-duty roster) and responsibilities says that the principal is under duty of care to provide a roster and ensure that it is implemented and that individual staff members are under a duty of care to implement the supervisory responsibilities allocated to them.

Section 4.2.2 Rules for use of playground areas and equipment states,

School rules would normally include:

- Expected code of student behaviour (such as no pushing, no jumping from specified high equipment)
- Caring for the area and equipment
- Use of equipment in wet weather
- Any areas that are out of bounds
- Rostering of students to use the equipment (may be needed if overcrowding occurs or if older students dominate its use)
- Sun protection

The anti cancer council of Australia has designed a set of guidelines for use in schools which promote practices designed to reduce the risk of skin cancer due to overexposure to the sun’s rays. Sunsmart policy has been widely adopted by primary schools in Australia although it is not compulsory. Guidelines encourage the wearing of hats and sunscreen when outdoors and the provision of shaded playspaces wherever possible. Evans (1997) found that one reason given for the elimination of afternoon recess breaks in Australian Schools was the need to minimize the time children spend in the hot afternoon sun. Evans (2005) discusses the fact that over the last five years government schools in a Victorian study he conducted have become more autonomous with timetabling and other policy decisions. He points out that it would help schools if more was known about the value of recess when it comes to policy making.
Announced in June, 2004 every Victorian public school did receive a $5,500 grant to team up with its local community and spruce up its grounds under the State Government’s $10 million “Schoolyard Blitz” initiative. Grants were received by 400 schools in the first year and all 1600 government schools will receive their grant within three years. This program encouraged schools to access community support by taking the concept of “working bees” to a new level. Schools were able to use the funding to improve student safety, provide sunshade protection, make environmental improvements and develop water-saving initiatives, and undertake garden beautification and playground enhancements.

Rowntree (1998) represents the thoughts of many in her presentation at the Second Australian Playground Safety Conference in Brisbane:

Due to the population accelerating and the global trend to urbanization our children have little or no first hand experience with nature, be it backyard nature or the great Australian bush. Parents prefer to keep their children indoors fearing that the local parks, creeks, bushland or beaches are too polluted or that their child may be abducted, step on broken glass, syringes or be knocked over by cars. Today’s society views the parent who allows children to independently explore the local neighbourhood as negligent…so where can children play safely and freely to experience the natural world? The only place left is the playground or school playground (Rowntree, 1998, p. 10).

The importance of play in today’s context, for all children, is summarized by Isenberg and Quisenberry(2003):

Children are growing up in a rapidly changing world characterized by dramatic shifts in what all children are expected to know and be able to do. Higher and tougher standards of learning for all populations of students are focusing on a narrow view of learning. Consequently, students have less time and opportunity to play than did children of previous generations. Few would disagree that the primary goal of education is student learning and that all educators, families, and policymakers bear the responsibility of making learning accessible to all children. Decades of research has documented that play has a crucial role in the optimal growth, learning and development of children from infancy through adolescence. Yet, this need is being challenged, and so children’s right to play must be
defended by all adults, especially educators and parents. The time has come to advocate strongly in support of play for all children (p.88).

2.4.2 Research in Australian primary school playgrounds

In Australia there has been a limited amount of research of play in primary school playgrounds however, Evans has consistently conducted research into aspects of Australian primary school playgrounds since the 1980s. His research has tackled both behavioural issues and environmental issues from the perspectives of both students and teachers. Evans’ work includes a collaborative study with American researcher Pellegrini which investigated the long standing “Surplus Energy Theory” (Evans and Pellegrini, 1997). Evans’ findings have described the changes occurring in Australian primary schools and the implications for the quality of children’s play. He has discussed trends such as increased school numbers and crowded school grounds, the elimination and shortening of free play time, removal of play equipment, increased incidences of bullying and after hours closing of school grounds (Evans, 1997, 1998). Evans has concluded that these trends stem from a lack of understanding by adults, of the importance of play to the development of the child. He considers that the learning which occurs in the playground is often considered peripheral to that which occurs within the classroom (Evans, 1997). He describes the widely held belief among teachers that outdoor recess breaks are for letting off steam before the recommencement of classroom activities. This long held Surplus Energy Theory has been refuted by the work of Evans and Pellegrini (1997) and Lambert (1999), who found that there were many other dimensions to the value of recess breaks. In his paper to the 2001 AGM of the Playgrounds and Recreation Association of Victoria (PRAV), Evans explains, “The dominant view is that playtime is simply a break between the “real” purpose of schooling. When we hear a parent say that children go to school to “learn” not play we realize how much has to be done to change people’s thinking about the value of play” (Evans, 2001, p.1).

Malone and Tranter (2003) conducted a study in four Australian schools investigating children’s environmental learning in relation to their school ground experiences. Their findings included the view that adults have frequently decided what children want in their school playgrounds. They also found that children benefit from contact with nature, highly valuing the ability to manipulate their environment and take part in the
process of creating playspaces. Importantly in this study, children preferred playspaces which were unstructured and not specifically designed for children’s play. Another important finding was that educators do not see their school grounds as places of learning, linking with Evans’ conclusions. They also found that school staff on the whole, subscribed to the “surplus energy theory” where the school playground was predominantly seen as a place for children to let off steam. Like Evans (1998), Malone and Tranter identified the importance of loose materials in playgrounds for children’s play.

Given that in Australia, individual primary schools are free to make their own decisions regarding playground policy, it is important to learn what is influencing the decisions that are being made. In other parts of the world, such as Japan, we can clearly see that schools are currently addressing problems created by environments with little challenge for children, their school playgrounds are now the places where risk taking is encouraged and promoted. Valuable lessons are there for us to see when we look at the benefits to children’s lifelong learning in the Adventure playgrounds in Europe. In addition we have the examples of Shaffer’s playgrounds in Germany where the natural environment stimulates the learning of life skills and community collaboration to enrich the lives of the children playing there. In the USA we see examples in some states where groups of concerned adults have formed to advocate for recess breaks in primary schools. The challenge for Australia is to provide children with stimulating school playgrounds where play is rich and engaging and children are learning life skills. Importantly, the changes which have been occurring in Australian primary school playgrounds have been identified by the research of Evans (2005) and Malone and Tranter (2003) but barren landscapes, conducive to increased anti social behaviours stimulated by boredom still continue to exist. This is alarming given our understanding of the value to lifelong learning, appropriate playgrounds can be.

This study aims to build on the knowledge already existing by looking closely at specific playgrounds in Melbourne and identifying, in each case, exactly what types of play are occurring in each playground. With this information, it will be possible to then incorporate the perspectives of the adult stakeholders, the teachers and principals, and to interpret their understandings. By comparing the adult views of the playground and the observed types of play occurring there a clearer picture may emerge. Gathering information from children, teachers and principals will also show how the policy making for the playground has influenced the types of play occurring. These findings can then be compared and contrasted with the play needs of the children.
This study aims to understand what is happening in three primary school playgrounds in Melbourne, each school was in a different social, economic and geographical context. Similarities can be drawn and comparisons made between these three settings. This study sought to understand the types of play children were engaging in and the influences on policy which impact on playground behaviours. The views of principals and teachers on the value of recess breaks were collected, as were their views on the importance of play for children’s learning.

The research questions which focused the study:

- What types of play are children engaging in at recess breaks in the playground?
- How are children using the play spaces and equipment available to them?
- How is current school policy impacting on children’s play in the playground?
- What factors are influencing current school playground policy?
- What are the perceptions of teachers and children of the playground environment and the types of play occurring there?
- How do teachers perceive their role as teacher on yard duty? What is the impact of teacher supervision styles on children’s play?
CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The focus of this chapter is the research approach used to answer the questions listed at the end of the previous chapter. These questions are designed to provide a rich description of the changing face of play in three Melbourne primary schools. The theoretical aspects of the research paradigm are presented, followed by an explanation for the choice of qualitative methodology and case study approach. An outline of the steps involved in the fieldwork of the research is interwoven with the theoretical aspects of the research. This is followed by a description of the processes used in analyzing the data.

3.2 Theoretical perspective: Interpretivism

Crotty (1998) discusses interpretivism and explains that this epistemological approach is appropriate when studying the human and social sciences where we are concerned with the individual case. As explained in the previous chapters, this study aims to better understand the changes which are occurring in three Australian primary school playgrounds and learn what factors are influencing these changes. The research questions seek the perspectives of children, teachers and principals in each of these schools. The research paradigm is interpretive and this perspective provides the frame for this study. The interpretive model links with the social sciences’ emphasis on understanding the world we live in, rather than the natural sciences’ emphasis on explaining the world (Semmens, 2004). This approach ‘centres on the way in which human beings interpret and make sense of their subjective reality’ (Holloway, 1997, p. 2). Green (2002) explains that interpretivism assumes a relativist ontology where reality or ‘truth’ is viewed in terms of multiple constructions, rather than the positivist view of one reality (p. 6). In this study the researcher seeks to understand how stakeholders perceive the importance of the playground in their school. With this understanding about each of the playgrounds in this study, the researcher can analyse the multiple realities that people construct when attempting to make sense of their day-
to-day existence. Because people’s actions stem from their understandings, these actions can be analysed for meaning and purpose. Scott and Usher (1999) explain that with the interpretivist framework the emphasis is on human action, and the assumption is made that the human action is meaningful and can be interpreted and understood (p. 2). They elaborate about meaning making:

In interpretivism, research takes everyday experience and ordinary life as its subject matter and asks how meaning is constructed and social interaction negotiated in social practices. Human action is inseparable from meaning, and experiences are classified and ordered through interpretive frames, though pre-understandings mediated by ‘tradition’. The task of research then becomes to work with, and make sense of, the world, through the frames and pre-understandings of the research rather than the categories of the social sciences (p. 25).

This results in an emphasis on the complexities in interrelationships between people as they go about their daily lives, and the ways in which they perceive their worlds (Green, 2002). This emphasis is critical in terms of researching the different perceptions of the changes occurring in primary school playgrounds. These varying perceptions will have a significant impact on the types of play occurring in the school playground of each of the schools where data is collected. Different perceptions bring about multiple viewpoints of the world and therefore seek complexity, ideally suited to a qualitative research approach based on the interpretive emphasis on social reality (Semmens, 2004).

3.3 Epistemology: Subjective

How do we know what we think we know? Tradition and experiences are sources of knowledge for the researcher (Scott and Usher, 1999). The researcher acknowledges that this study is a social practice, therefore culturally embedded and embodied within the relationships of all participants. The researcher’s philosophical beliefs are integral to the research process and cannot be ignored until after the event (Scott and Usher, 1999). The philosophy of knowledge is embedded in the theoretical interpretivist perspective, acknowledging the importance of social relations and cultural background, and thereby in the methodology. Green (2002) describes the interaction
between researcher and participants as a social practice, noting the subjective nature of constructed understandings. Holloway (1997) proposes that researchers explore the concept of ‘reflexivity’ in which they must take into account their own position in the setting and situation as the researcher is the main research tool’ (p.2). In this study, the researcher has a background in primary school teaching and early childhood teaching. Working in the early childhood field has strongly influenced the researcher’s belief in the importance of play based learning for children. A concern for the impact of children having limited opportunities to play freely outdoors in primary schools has influenced the design of the study and the questions asked in this study. An awareness of increasing restrictions being placed on children in the primary school playground, as outlined by Evans (1997), heightened the researcher’s concerns with regard to children’s right to play as outlined in Article 31 of the UN Convention on the Rights of the Child. Many years of working with children in these educational settings has led the researcher to question changes in the primary school playgrounds that she has observed during her teaching career. A desire to understand what factors influence these changes prompted this current research. Australian primary school education has traditions which, although only a little over 200 years old, are none the less well established. It is evident in the photographs contained in Chapter 2, that the school playground was not given equal importance with the school buildings as schools were built throughout Australia following settlement. This is one of the few studies conducted in Australia, focusing solely on the playground. Researchers must be aware of their understanding of what is being studied and their interactions with participants in terms of influencing analysis of data. The design of data collection methods has given much consideration to ‘reflexivity’, focusing on creating situations which would put participants at ease. The social relations within the primary school structure in Australia are acknowledged in this study and have greatly influenced methods of data collection also. The researcher is aware of and has personally experienced many times, the hierarchical nature of school staff. This influence has also been considered during the design of data collecting methods.

3.4 Approach: Qualitative

This study primarily uses qualitative methods of data collection and takes a case study research approach. However a multimethod approach adds breadth to the data collected. Qualitative methods are appropriate, given the emphasis on ‘thick’ description (Geertz, 1973) or in-depth data. Such in-depth data allows complex
understandings rather than surface level findings because the research is aimed at exploring the different perceptions the participants had of the playgrounds in their particular school. Such perceptions are subjective in nature and as such, are open to varied responses from participants and generally not suited to quantitative analysis. Miles and Huberman (1994) propose that qualitative data with their emphasis on people’s lives are fundamentally well suited for locating the meanings people place on the events, processes and structures of their lives...and for connecting these meanings to the social world around them (Miles & Huberman, 1994, p.10). Holloway (1997) suggests that qualitative researchers explore the ideas and perceptions of the participants, the insider's view, and search for commonalities. Participants in this study have connected meanings to their experience of the playground. Such meanings encourage thematic analysis yielding patterns of commonality as well as points of difference.

3.5 Case study

A case study approach was chosen and data was collected in three Melbourne primary schools. The three schools in this study were not considered as a statistical representation of all Australian schools but as a functioning parallelism. That is to say, the researcher believed that there would be an explicit set of functioning linkages between the larger whole, and the smaller part. This approach was described by Brewer and Hunter (1989).

3.6 Sampling

Patton (2002) argues that nothing better captures the difference between quantitative and qualitative methods than the different logics that undergird sampling approaches (p. 230). Unlike quantitative research, qualitative research generally relies on a smaller number of participants in a study, often specifically, rather than randomly, chosen. The sample is therefore not intended to be representative, but still insightful and worthwhile. Holloway (1997) suggests that qualitative sampling is generally purposive or purposeful (p.142). The qualitative researcher is often seeking ‘rich’ data at the expense of ‘generalised’ data in order to explore and gain an understanding of the ideas of the people specifically chosen for the study. People are chosen for the study
mainly on the basis of their extensive knowledge and understanding of the phenomenon being studied, having experienced the workings of the phenomena itself. The composition of the sample of participants being observed and interviewed is critical for thick, in-depth data. Patton (2002) suggests that the desire of qualitative researchers to gain an in-depth understanding of the phenomenon being studied leads to purposeful sampling:

The logic and power of purposeful sampling derive from the emphasis on in-depth understanding. This leads to selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, the term purposeful sampling (p. 46).

Purposeful sampling has been used in this study to generate ‘rich’ data to provide the source for qualitative analysis description.

**3.7 Selection of the sample of schools**

Collective case study is described by Denzin and Lincoln (2000) as:

the study of a number of cases in order to investigate a phenomenon, population, or general condition...Individual cases may or may not be known in advance to manifest some common characteristic…They are chosen because it is believed that understanding them will lead to better understanding, perhaps even theorizing, about a still larger collection of cases (p. 437).

In this study the case consists of three primary schools.

A purposive sample was chosen:

For qualitative fieldwork, we draw a purposive sample, building in variety and acknowledge opportunities for intensive study…selecting a case of some typicality, but leaning toward those cases that seem to offer opportunity to learn. Balance and variety are important; opportunity to learn is of primary importance (Denzin and Lincoln 2000, p446).
These three schools were chosen because of their location, one school within an inner city high density housing area, one school within a middle suburban well established area and one school situated in an outer suburban, new growth area. Each school had been in operation for differing number of years, had a different sized enrolment, allowing opportunity for comparisons. The different areas were chosen to give contrast of socio-economic environment. Each school also had varying characteristics such as environmental surround and ethnic diversity. The schools also varied in the stability of school population, both staff and students. The differences in the three case study schools would help to understand the influence of space, equipment, population size on diversity of play characteristics and experiences in each setting.

School 1

This school is located in a north eastern residential suburb of Melbourne. It was established in 1962. The school has a small number of children from a non-English speaking background and a small number receiving educational maintenance allowance, for families calculated to be on a low income. There are currently 281 students and 15.4 teachers. Student numbers have increased in the past three years from 238 in 1999 to 256 in 2000. Children either walk to school, are driven or catch a suburban bus. All staff, both teaching and non teaching, are rostered on yard duty.

School 2

This school is situated in a densely populated and culturally diverse inner city area. The student population is currently 130 students, predominately drawn from the nearby Department of Housing estates. Sixteen languages other than English are represented, the most commonly spoken being Turkish, Slav Macedonian, Hmong and Vietnamese. All the children walk to school. The school opened in 1874. It is one of Melbourne’s oldest schools. There are 13 teachers on staff and 4 integration aides. All staff, teaching and non teaching, and some parent volunteers are rostered on yard duty. There is no ‘out of hours program’ for children at this school.
School 3

This school was established on its present site in 1996. It is a fringe suburban school and part of a rapidly growing corridor. Very few children walk to school, most are driven in cars or catch a bus.

Children attending this school are drawn from both the immediate area and beyond. There is some diversity in cultural and ethnic background. There are low numbers of children who speak a language other than English at home, who are of Aboriginal or Torres Strait Islander background, there are few children whose parents receive Educational Maintenance Allowance (calculated to be on a low income), or of children who frequently change schools. Enrolments rose to 362 in 2000, 417 in 2001, 474 in 2002 and currently are 543 with 575 in 2004. A number of new housing estates are being developed in the area so it is anticipated that enrolments will continue to grow. The school is structured into straight prep grades with composite grades across the rest of the school. The current staffing numbers are 31.3 teachers, 3.2 integration aides. All staff are rostered on yard duty. There is an Out of Hours program that is very popular and is run before and after school. There is a waiting list for every day of this program.

3.8 Participants

When selecting participants for this study, emphasis was placed on having participants from each of the identified groups being part of the research in each school. Three groups of participants were identified, based on their respective roles in the school:

<table>
<thead>
<tr>
<th></th>
<th>One from each school</th>
<th>Individual Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>All teachers who expressed interest in participating</td>
<td>Questionnaire</td>
</tr>
<tr>
<td>Students</td>
<td>Focus group of boys and girls from grades 2/3 with permission to participate</td>
<td>Small Group Interview</td>
</tr>
<tr>
<td>Students</td>
<td>All children playing in the playground.</td>
<td>Observations in the Playground.</td>
</tr>
</tbody>
</table>
The role of the researcher prior to conducting playground observations was to map the playground in each school, identify, number and photograph playspaces, conduct interviews with principals and focus groups of children, collect artifacts from focus group children, speak at a staff meeting to introduce the study and distribute and later collect teacher questionnaires.

3.9 Location and timing of the study

Denzin and Lincoln (2000) acknowledge that “The case study researcher faces a strategic decision in regard to how much and how long the complexities of the case should be studied. Not everything about the case can be understood-how much needs to be?” (p. 439). In this study it was decided to gather data during term 4 of the 2003 school year. By this stage of the year, all children including the prep grade were familiar with the playground and equipment. Weather was more likely to be fine and not to interrupt sequential days of observation in the playground. In order to limit variables such as weather and familiarity with the playground it was important to complete playground observations within term 4 of the school year. This timely completion of playground observations allows for seasonal games and play influenced by current events (sporting/popular culture) to be compared and contrasted in the three schools during a set time frame. It also meant that similar weather conditions during each period of observations were enabled comparisons of how individual schools interpret Sunsmart guidelines. The researcher did allow two weeks in each school to complete data collection; this will mean playground observations were conducted at both morning recess and lunchtime breaks for ten days. The lunchtime recess break, being longer, will allow for the researcher to spend more time in each playspace than during the morning recess break. It was also allowed for the researcher to see if play is ongoing, that is, if it continues on from morning recess to lunchtime break. As playgrounds observations was only one of the methods being employed in this research, it is considered that forty observations of each playspace will give an overall picture of the types of play children are engaging in, how they were using playspaces and equipment and the gender, number and age group of players in the different playspaces will be seen.
3.10 Getting approval for the study and gaining access

Approval was given by the RMIT University Human Research Ethics Committee prior to commencement of the investigation. The research was classified as Medium Risk. Permission to approach Schools was obtained from The Department of Education and Training. The DEandT was initially reluctant to allow this research in school playgrounds saying that it would be necessary to gain written permission from every parent/guardian of every child in the playground. The researcher realized this was an impossible task and it required persistence over several months to gain permission to approach schools for this study.

Following approval from DEandT principals of schools in appropriate geographical locations were phoned, seeking approval to conduct research in their school. The researcher found it very difficult to find an inner city school principal who would allow research in that school’s playground. Twelve schools were approached and a range of reasons were given as to why they would not participate. The most common reason was that teachers were operating under considerable stress and the principals perceived that this research study would add to their stress. Letters were then sent to participating schools describing the study in a plain language statement and outlining the issues of voluntary participation and confidentiality for each phase of the study. All participants in the study, principals, teachers, children and parents/guardians, were given plain language statements and written permission was obtained from all participants (see appendices 1 & 2).

3.11 Triangulation

Essential to qualitative research is the set of processes a researcher puts into place to ensure 'rigour’, both in terms of the reliability of the raw data and the consequent application of that data. By following qualitative research processes and checks such as reading and re-reading the interview transcripts, obtaining colleague validation of findings from the observation data and discussing questionnaire responses in peer debriefing, a researcher can produce sound findings and also support conclusions arising from the study.
As explained by Denzin and Lincoln (2000) researchers must employ various procedures so that the likelihood of misinterpretation is reduced. These procedures generally are called triangulation. Triangulation has been considered a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation. In qualitative studies such as this it is never possible to repeat observations perfectly however triangulation serves to clarify meaning by identifying different ways a phenomenon is being seen. Denzin (1988) explains the need for triangulation of research methodologies, saying that the diverse methods and measures which are combined should relate in some specified way to the theoretical constructs under examination. He further explains that the use of multiple methods overcomes the weaknesses or biases of a single method. He points out that the social world is socially constructed, and their meaning, to the observer and those observed, is constantly changing. As a consequence, he says, no single research method will ever capture all of the changing features of the social world under study. He concludes that interpretations built upon triangulation are certain to be stronger than those which rest on the more constricted framework of a single method. Denzin strongly advocates that the social sciences must move beyond investigations that triangulate only by data source, or by research method. He says that multiple triangulation must become the goal and aim of these disciplines. This study attempts multiple triangulation by using both multiple data collection methods and multiple data sources. Three school settings were chosen in order to have multiple data sources. Within each school, three data sources were used, principals, teachers and children. Data was collected by photographing all playspaces in each school, mapping, interviews, observations, questionnaires and artefact collection. The researcher considered each method had the potential to provide data which would make a valuable contribution to the overall picture, enabling the researcher to move closer to answering the research questions.

3.12 Data collection

The researcher chose to act alone in the process of data collection as she believed that her knowledge of primary school culture would enable her to address the complexities of visiting school settings as a researcher. Although collecting data in three schools as a lone researcher was an ambitious task, an advantage was that when methods are designed and employed by the same researcher in a short period
of time, the same level of knowledge and skill are more likely to inform each set of results (Brewer and Hunter, 1989, p. 85). In other words, the researcher wanted to do all data collecting herself to minimize variation. She believed that her years of experience working in schools and participating in playground supervision would influence her demeanour in the playground during data collection. The researcher was aware that in previous studies of school playgrounds researchers have felt it necessary to spend extended time in the playground before commencing data collection in order to reach a point where children would ignore their presence (Eiferman 1971; Sluckin 1981; Blatchford 1989; Evans and Pellegrini 1989). These previous studies varied in many ways from the current study under discussion and most significantly in the fact that in many previous studies, very detailed understandings of the play of children was being sought and consequently, researchers needed to spend extended periods observing play episodes. This study does not seek detailed understandings of play episodes but during playground observations the scan sampling approach sought only to identify clearly play categories and the playspaces used within the playground.

The research problem lends itself to the gathering of data, using a range of data collecting methods to build a picture of the children’s use of playspaces in primary school playgrounds. In this study the researcher’s preference for working with people, words and images in natural settings has also influenced the choice of methods. Other influences on the researcher include a preference for observation as opposed to experiment and a desire to use inductive analysis rather than hypothesis testing.

The researcher is experienced teaching in both primary and early childhood settings and considers this an advantage when collecting data in school settings bringing to this study an understanding of the daily practices and demands within schools. The professional background of the researcher also enables an increased sensitivity to the school contexts with particular routines, rituals and language as well as acknowledging specific constraints upon participants because of their role in the school. The researcher’s own experiences of playground supervision have also influenced the design of the study with regard to the questions of teachers. Questions are deliberately open ended and are not based on an assumption that participants will enjoy yard duty. The researcher expected that due to the stressful nature of primary teaching today, many teachers may not wish to add in any way to their stress load by participating in this study. The researcher is respectful of this perceived situation and in no way desires to increase teacher stress in any school setting in this study.
In order to answer the research questions, the researcher believed a range of methods would deliver the most meaningful results. The researcher is attracted to the humanness of this approach. The understandings of the researcher were based on the researcher’s interpretation of data. The researcher’s biases and subjectivity have been acknowledged in this chapter and were monitored throughout this study.

Although the reading audience may include other researchers working in the area of children's play in primary school playgrounds who are familiar with previous research in this area, the researcher hopes that the reading audience will also include policy makers at the school level. Every effort has been made to write in a clear and concise way, paying particular attention to clarity for lay readers. The researcher also hopes that the audience will include policy makers at the government level. This potential audience also influenced choice of methods. Knowing that more objective answers are needed to inform public policy, the researcher attempted to use systematic procedures to arrive at answers to the research questions. Brewer and Hunter (1989) explain that research is a practical and practised reality in the world of policy analysis and policy research. Research conducted under conditions of time and resource constraints and geared towards action programs in an experimental society, where decision makers need analyses to weigh alternatives objectively, requires the social science community to provide the best it can offer.

3.13 Methods

It will be necessary to observe children in the school playground setting as well as interview stakeholders and collect artefacts in order to collect data to address the research questions. Lincoln and Guba (1985) believe that qualitative methods are most appropriate when studying humans because the methods are extensions of normal human activities: looking, listening, speaking, and reading. They expand this by saying that techniques such as interviewing, observing, investigating and collecting available documents and records will produce rich data. Non-verbal cues such as environmental features and weather conditions will be collected also and during analysis will be considered as possible influences. This alone will not be sufficient in this study as the researcher wishes to compare the findings from three schools in different socio-economic areas of Melbourne. This study is seeking a rich picture of the
three primary school playgrounds and the types of play children are engaging in so that comparisons between schools can be made, however it is also seeking a more detailed understanding of what is happening in each school in order to understand as much as possible, what is impacting on each playground and the opportunities for play provided within it.

Researchers from Britain and the USA, who have conducted many studies of children in the school playground, describe the importance of reliable findings, suggesting that,

…it is important that these findings are firmly grounded, reliable and valid, and to that end it is important to examine in a critical way different research methods for studying children in schools. Most specifically, we concentrate on the use of direct observational methods for studying children in different school settings such as the playground…Observational methods are important because they enable us to describe in a systematic and rich way the everyday interactions children have with their social and physical environment (Pellegrini & Blatchford, 2000, p.4).

Within the scope of this study, a range of data collecting techniques combine with a variety of relevant data sources to improve the likelihood of answering the research questions comprehensively. Having spent many years teaching in a number of Australian primary schools, the temptation to base the choice of data collecting methods on intuition, the subconscious and assumption was strong for the researcher. In order to address this issue it was important to select methods intentionally, based on a reasoned response to the research questions and to then clearly state these at the outset of the study.

The techniques and procedures used to gather data in this study were mapping, observation, interviewing with individual and focus group, questionnaires and artifact collection. This combination of a range of data gathering strategies helped the researcher gain a better understanding of the subject area. It also provided a means of cross checking reliability of information gathered. The validation process was enhanced further by the use of multiple sources (principals, teachers and children) and multiple techniques (mapping, observation, interviews, questionnaires and artefact collection). Evans (1989) explains his choice of naturalistic enquiry for his research in Australian playgrounds, saying that it is consistent with the philosophy of understanding behaviour in natural settings. In his research Evans used observation,
interviews, written records and sometimes audiovisual information. By using several data gathering strategies he was able to gain an understanding of the social and environmental complexity of the playground.

3.13.1 Playground observations.

Choosing to observe the playground at recess times, during the morning and lunchtime breaks is, as Burns (2000) describes, “always an artificial act, for you break off a bit that is normally integrated into the whole”. When discussing the best methods for studying children in schools, Pellegrini and Blatchford (2000) state that observational methods are important because they enable us to describe in a systematic and rich way the everyday interactions children have with their social and physical environment. The qualitative researcher tries to take into account this relationship of the part to the whole, but limits subject matter to make research possible (p. 464). In this study, the researcher chose to map each playground prior to observational visits in order to take a purely observational role in the playground while seeking complete detachment from the play being observed. This detached stance allowed a more comprehensive view of the play, with decreased likelihood of being influenced by the agendas of participants (Scott and Usher, 1999). The researcher wished to avoid being seen as a teacher on yard duty as this would attract interaction from the children and interrupt the focus of the observations. It was evident during the preliminary investigations that if the researcher/observer moved as inconspicuously as possible around the playground and avoided any interaction with children or supervising teachers, she was ignored by the children. This detached stance also allowed the researcher to be more removed from her own specific agendas and position in relation to the subjects being researched. This resulted in a more objective view of the reality of the types of play being engaged in different areas of the playground.

As already discussed, the researcher is mindful of previous studies in the school playground where researchers have been concerned about the impact of their presence on children’s behaviours and have allowed for this by spending extended periods in the playground prior to the commencement of data collection. Eifermann (1971) noted that children were, at first, distracted by the presence of an observer. They would ask questions, show off or become secretive, but things returned to normal
quickly. In this study, the researcher wished to avoid interactions with the children completely. The researcher aimed to remain seated in places detached from the play while observing certain areas of the playground. The researcher deliberately avoided standing or sitting in areas where children were gathered. Whilst walking between areas of the playground the researcher moved quietly, avoiding contact with children and never initiating conversations. If a child did ask a question the researcher gave only a brief response.

Previous studies however, sought to answer different questions to those at the heart of this study. In the multi method approach, the playground observations will be only one data collection method and scanning each playspace for short periods on a regular basis will provide the details required to prepare the graphs for analysis. This method of scan sampling was used by Boulton (2005) who found he needed only one minute to observe each child in his playground study, in order to determine the activity he/she was engaged in and the number of companions they had. In this study the scan sampling method involves a short period of time observing each playspace, approximately 5 minutes. During this time the observer will scan the playspace and note the types of play which are identifiable according to the play categories designed during the pilot study for use in this study. The gender of players in each play category will be noted as will the age group and number of players. For the purposes of this study it is not necessary to have exact details of numbers of players and exact age group. For the purpose of comparison it is sufficient to state as accurately as possible how many players are in the play and what grade level they appear to be. In some instances, when areas of the playground have been designated for specific grade levels, it will be simpler to see when players from other age groups are present. These observations are designed to give information about who was using the playspaces, what types of play children are engaging in, and how they are using equipment. This study is not looking closely at the play experiences of children but is interested only in the categories of play. Field Notes were used to support the observations taken in the playground. These were supported by photos of spaces and equipment. Comments and instructions made by teachers on yard duty were also noted when observed. It was the researcher’s view that these incidental observations and conversations between teachers on yard duty and children in the playground should not be ignored in this study. As pointed out by Armitage (2001), they are a significant part of playground life.
Formal process of observing

Prior to formal observations each school was visited and the playgrounds were mapped and photographed. Each playspace around the playground was numbered. When carrying out observations each day the observer began at playspace 1 and then, after recording observations there, moved to the next playspace, in numerical order. Playspaces were numbered to provide efficient movement around the playground in the time available. This process continued until every playspace in the playground had been visited and observations had been recorded. Each playspace was visited once per session, usually for about five minutes. On each day the researcher observed the playground during the morning recess break and the lunchtime break.

In addition to observing playspaces and play categories other incidental recordings were also made such as:

- Comments received from teachers supervising in the playground.
- Interactions between supervising adults and children.
- Weather conditions were also recorded as a possible influence on children’s play choices.

Observations were recorded under play category headings in a brief descriptive form and consisted of number of players, number of girls/boys, age group of players, incidental information was anecdotally recorded such as props children were using, interruption by a supervising teacher, brief explanation of the play if there was something particularly interesting in the use of equipment or play that was happening.

3.13.2 Interview with principals

The purpose of including interviews as a data collection method was to allow some access to past events which have influenced current playground practices. The interviews also provided an avenue for understanding what processes and which stakeholders have influenced the process of playground policy making. The interviews were also designed to reveal the belief systems of principals, teachers and children about play and the playground in each setting. The researcher was seeking the truth as the informant perceives it (Burns 2000). Therefore, principals, teachers and
children were not rigidly restricted to set questions but were guided by open questions to develop their responses during interviews. In this study, three types of interviews were used to collect data. Principals were given a structured interview (See Appendix 6) which was tape-recorded. Teachers were given a questionnaire (See Appendix 7) and a focus group of children from each school were given a group interview (See Appendix 5).

The information given by each principal helped establish a richer picture of each school and the role of the principal in the formulation of playground rules within that school. These interviews also aimed to reveal issues around the provision of play equipment and playspaces in each school playground. Understandings of the importance of outdoor play and recess breaks were also sought from principals as were views on the contribution of other stakeholders in the formulation of playground policy in each school. Another area which was explored during interviews with principals was their views on the role of teacher on yard duty.

The timing of the structured interview with principals was not critical in relation to other data collection. Principals were given a copy of the interview questions several weeks prior to the researcher visiting the school to collect data. This allowed the principal time to give consideration to the questions and seek clarification of meaning, if required, prior to the interview. The researcher chose to give principals a copy of the interview questions prior to the interview as a matter of courtesy. The same set of questions was used with each principal. A number of steps were taken to ensure consistency among interviews. The interviews with principals were taped so the researcher could engage with the principals rather than needing to concentrate intently on recording the information given. The reliability of response between interviewees was of paramount concern, with scope for the elucidation of responses (Scott and Usher, 1999). Principals were interviewed privately for a number of reasons. The researcher did not want teachers present as she believed some teachers may be influenced by the principal’s views and this may colour their own questionnaire responses. She also felt that the principal would be free to speak openly about supervision styles of teachers without fear of repercussions with staff members. In this setting, the principal could also discuss the protocol for formation of playground rules. Allocation of school funds for playground equipment could be discussed in a private interview without the fear of wider staff discussions developing should teachers be present.
3.13.3 Teacher questionnaires

Teacher questionnaires were given to teachers who were interested in participating in this study. The researcher sought the views of those teachers who showed an interest in the playground. By allowing teachers to freely choose whether or not they would complete a questionnaire, the researcher believed that the level of interest of teachers in participating would be a measure of the level of their interest in the playground and outdoor play. For example if most teachers in a school enthusiastically responded to the invitation to fill out the questionnaire, it would demonstrate that there was a strong interest in the playground by teachers at that school. If however, a small number responded, this would indicate a lack of interest by teachers in that school.

This research is also comparing how these interested teachers are encouraged to participate in decision making relevant to the playground in each school. Teachers who participate in this study will be asked to reflect on their role as teacher on yard duty and on their perceived supervision style. Teachers were not required to identify themselves in the questionnaire. The researcher chose this method because she was aware of the hierarchical nature of schools and believed that teachers would be most free to answer questions in an anonymous forum. The researcher sought both positive and negative responses from teachers, that is, responses which may disagree with school policy or with the views of other teachers. The researcher also wanted teachers’ views on playground supervision and believed they would be most able to give their honest views if they remained anonymous.

3.13.4 Focus group interviews and artifact collection.

The group interviews with the focus groups of children were designed to be held after playground observations were completed. The focus group children were chosen from grades 2/3 in each of the sample schools. This age group was chosen by the researcher because it was likely that their play choices would extend to those common in both the younger and older age groups of children in the playground. In other words it was likely that children in the focus groups may play with both younger and older children. Had the focus group been chosen from either prep or grade 6, such a cross section of types of play would be less likely. The researcher aimed at having three boys and three girls in each focus group and asked the classroom teachers to choose
five boys and five girls randomly. Permission forms were sent home with children and those whose parents/guardians gave permission for their child to participate, became members of the focus group.

This was not an attempt to understand the views of all children in each school as the number of children interviewed is not representative. The purpose is to seek a ‘thick’ description for a few children of how they perceive their school playgrounds. The responses from each school were compared to some extent but the primary purpose of these interviews was to gain a depth of understanding. In contrast to the playground observations which seek only to scan the play children are engaging in, these group interviews were designed to reveal more intimate detail of the play of children in the playgrounds of each of these three schools. To compliment this data, children in the focus groups were asked to draw and/or write about their playground experiences. The researcher believed that this data may reveal information not evident during observations, therefore adding to the depth of understanding.

The researcher was aware that the children being interviewed within a school setting would understand the power relationship of the adult interviewer as that of a teacher. The small group structure was designed to provide as relaxed an atmosphere for the children as possible. Interviews were conducted during class time in an empty room away from noise. Children had a “practise run” with the tape recorder, recording and replaying their voices. The responses of participants were tape-recorded for ease and accuracy of recording their responses. For the focus group interview with the children, the same sets of questions were used by the researcher as a guide when posing questions (See Appendix 5). The researcher explained confidentiality of data to the children and the importance of their data to the study. These interview questions were less structured than those used with principals as the researcher wanted the questions as a guideline only, believing that the children may be focused on specific issues. The researcher wished to follow the discourse of the children, rather than restricting them to a set of questions. The researcher was seeking information about the children’s view of the playground, features of preferred play spaces and equipment, the impact and relevance of playground rules and their perspective and attitudes about the role of the teacher on duty. Evans (1989) explains that cited conversation specimens captured on tape are valuable to illustrate a point. Despite the time consuming task of transcription of tapes, they are available for others to analyse, therefore enhancing the validity and reliability of data.
Evans (1989) asked children to write about or draw pictures of their life in the playground. He found it a useful way of assessing their interpretation of their playground culture. Malone and Tranter (2003) also asked children to draw about their play in their study asking them to illustrate important places in the playground and also asking them to draw improvements they would like. In this study, children in the focus group from each school, were asked to draw and/or write about an aspect of their playground which they liked. As well as providing another means of interpreting children’s ideas about their play in the school ground it was also an opportunity to verify information given in the group interviews.

3.14 Pilot study

A major aim of the pilot study was to give the researcher experience with each of the methods of data collection and serve as a “practice run” for interactions with participants in schools. Importantly the researcher wanted to see how children reacted to the presence of an unknown adult in the playground as this would influence the design of data collection methods in the major study.

The researcher spent three weeks in a Melbourne primary school in order to trial data collection methods. The school was chosen because it was in a convenient location for the researcher to visit, this being the only consideration in choice of school. The researcher was unknown to the principal, teachers and children and believed this to be very important for trial procedures planned for the major study as this would also be the case in the major study. The principal enthusiastically welcomed the research, into the playground and expressed a keen interest in outdoor play. Initially the researcher spent two days in the playground, deciding how to efficiently divide it into playspaces for observation purposes. She decided to divide the playground into playspaces after observing where children played on a regular basis and considering the practicalities of moving about the playground in the limited time of recess breaks. The researcher mapped the playground identifying playspaces and during recess and lunchtime carried out observations of the play occurring in these spaces. She took detailed notes of the play observed and then gave consideration to emerging categories During this process play categories were trialed. The researcher had accurately predicted in a general sense what types of play she would observe in the playground. In other words she expected to see children playing formal games with rules, role play/imaginary games, play involving natural materials such as dirt and leaves, chasing games,
skipping and chants and also children just wandering around or sitting in quiet places. During preliminary observations, the researcher noticed that it was not difficult to identify the age group of children as the playground was segregated into areas for different age groups to play. Also because of the professional experience of the researcher, she was confident that she could estimate the age group of children accurately enough for the purposes of this study.

Initially the researcher spoke at a staff meeting outlining her proposed study and informing the teaching staff that this was a preliminary study. The researcher distributed questionnaires to fourteen interested teachers in the school and the principal agreed to pilot the interview questions. The classroom teacher in grade 3 allowed the researcher to informally discuss the playground with the children during class and ask them to write/draw about their playground. The purpose of this discussion was to hear what the children would say about their playground, playspaces and playground rules. Ten days were taken to trial play categories and methods of recording information.

In this study the researcher was concerned that her presence in the playground may be disruptive and a trial of techniques for remaining unobtrusive, including keeping movement to a minimum, walking from area to area around edges and not through the middle of playspaces, not making eye contact with children, not talking with teachers on yard duty, and not wearing bright colored clothing, was conducted.

3.14.1 Findings of the pilot study

1. Various ways of conducting playground observations were attempted. This involved trialing a range of methods of recording information and techniques for remaining unobtrusive in the playground. The trial showed that for the observer to remain unobtrusive in the playground it was necessary to refrain from any eye contact or interactions with children or teachers. The researcher believed it likely that children would naturally be drawn to an adult in the playground for assistance. This proved to be incorrect. Children during the recess breaks ignored the researcher’s presence. Prior to commencing observations the researcher felt it would be necessary to observe play from the sidelines, often seated on a bench away from the action and conducted herself in this manner from the beginning of the pilot study. This proved to be a good strategy. During the pilot study it became obvious to the researcher that it
would be possible to go into unfamiliar school playgrounds to collect data and have no impact on the children playing there. By moving quietly and inconspicuously from one playspace to the next, observing and recording data and not lingering in one place for very long, the researcher found that she was completely ignored by children and teachers on yard duty. She did however acknowledge that researchers collecting data in school playgrounds in the past have considered this an issue, so she allowed that should extra time be required to become inconspicuous in a playground, this would be an important consideration.

2. A mapping exercise was trialed to record the range of different play spaces so the types of play in each space could be observed. It was evident during the trial that it would be impossible to record the play of all children in the playground. This was due to two factors: 1) the number of children in the playground was too large to accurately observe the play of all children; 2) there were a number of children roving around the playground during the recess break who could be missed by the observer, because of their constant change in location. In order to address the research questions however, it was not necessary to record in detail the play of every single child in the playground. The researcher sought a picture of the types of play children were engaged in, in other words she was looking at how children were using each playspace. In any particular playspace she looked for the types of play she could see, for example children may be seen playing cricket on the oval and another small group of children may be chasing each other around the edge of the playspace. She was also interested in a broad description of the gender of players and the age group of the children playing. By observing each playspace over a ten day period the researcher could see how the use of each playspace changed in that time. During the pilot study there were no dramatic changes to use of playspaces although some play was only observed over one day. Observing the same play in a playspace for longer than ten days seemed unhelpful for answering the research questions.

3. Different ways of categorizing play was trialed. The researcher drew on prior knowledge of children’s playtime activities to initially categorize play. Firstly it was decided to divide the play of the children into seven categories for efficient recording. During the pilot study, the researcher watched for play which did not fit into these categories and refined categories until she was finally satisfied that all the play being observed could be labeled. This was not a perfect
solution as during some observations, children displayed a range of play types. Therefore it was decided that on the occasions when play changed or incorporated more than one type of play, all categories of play would be simultaneously recorded. For example, in the pilot study, a small group of children were observed playing baseball and those who were waiting for their turn to bat were engaged in rough and tumble play. In this example both types of play would be recorded. The researcher did not observe any chants and rhymes or skipping games during the pilot study however decided to include this category because extensive research in the past has indicated a strong presence of this play (Opie and Opie, 1959, 1980).

4. Staff questionnaires were given to teachers as part of the pilot study to seek feedback on the design of the questions and length of the questionnaire. The questionnaire was modified because some teachers in the trial complained about the length of the questionnaire. The researcher reconsidered the questions and was able to omit some which were obviously superfluous when reconsidered and were not necessary to answer the research questions. Other teachers also suggested that they be allowed to complete the questionnaires in their own time rather than in a short session arranged by the researcher. This would allow for reflection time. The researcher decided that although this may result in a poorer return rate, it may also result in richer data. These questionnaires were designed for the purpose of understanding how individual teachers perceived their role when engaged in yard duty, to gauge their perceptions of the importance of outdoor play in the school playground and to learn what portion of their week was spent on yard duty. The questionnaires were also a way of verifying data gathered during the interviews with principals with regard to the role of teachers on yard duty. The responses from teachers during the pilot study gave this required information with most teachers giving detailed written responses.

5. The principal trialed an interview and discussed the interview questions with the researcher. He suggested that a copy of questions be given to principals prior to the interview. He explained that statistical details could then be prepared beforehand. The purpose of interviewing principals is to learn about playground policy in the school with regard to rule making and enforcing, removal and replacement of equipment, responsibilities of teachers on yard duty and attitudes about the importance of outdoor play and recess breaks. When comparing the responses of the teachers to questions about their role
and responsibilities on yard duty, it was interesting in the pilot study to find some contradictory information given by the principal. In the major study the responses of the principal will also be compared with those of the focus group of children for verification, particularly in the area of playground rules and their enforcement.

6. A focus group of children discussed their play with the researcher and made drawings of their play. The informal discussions with the children in grade 3 about their playground brought issues forward which the researcher had not considered. They discussed many ideas for improvements to the playground which sounded practical. This prompted the researcher to include a question about suggested improvements to the playground. The children were very reflective about play they had engaged in during their prep year and were reminiscent about equipment which had been removed from the playground—particularly wooden structures. This prompted the researcher to include questions referring to equipment which had been removed and previous play experiences. In the pilot study one area of contradiction between the focus group and the principal was in the area of playground rules. The principal said there were no specific playground rules whereas the children listed many.

7. Most children chose to draw, some wrote on their drawings and two children wrote without illustrations. The time taken by the children to complete their work varied greatly but it was 30 minutes before all children were finished. The researcher found that many children wanted to discuss and explain aspects of their illustrations. The researcher decided to allow 30 minutes for the focus group in the major study to complete their drawing/writing and to also include time for discussions if the children desired this.

3.15 Play categories

The most important outcome of the pilot study was the refinement of play categories for use in the major study. The researcher trialled play categories and found that the following list most adequately described observations of children at play: structured games with rules; chants and rhymes; rough and tumble; imaginative; popular; scientific/sensory and illicit. These categories are based on the work of other researchers and theorists, however the science/sensory category has not previously been articulated and it recognises the sensory experiences of young children as a means of gaining understandings and making meaning of their physical world. This
play category combines the search for understanding of physical phenomena and sensory aspects of children’s play.

The problem of describing and categorizing any behaviour is discussed by Pellegrini (1995). His point that when observing humans we simply cannot hope to capture all that is happening, concerned the researcher with regard to designing a schedule of play categories to use during observation sessions. This study focuses on the types of play and the use of play spaces. Other aspects of playground behaviour may be noted but essentially are outside the scope of this study.

The following categories have been influenced by theorists discussed in the literature review chapter of this study, who have studied the play of children from different perspectives and in the pilot study covered all the play observed. The details given under the following headings explain exactly how observed play is categorized in this study. As previously mentioned, it is important to acknowledge that for some team members in the category of games with rules, this will not be a playful activity. Using a scan-sampling method of observation means that it is impossible to discern which players are there under sufferance, just making up numbers and which are truly playing.

- Structured- games with rules where there are winners and losers Roberts et al. (1959), Eifermann (1971), Meckley (1995), Hughes (1999), Jambor (1999), Flemmen (2005). This included formal games such as cricket, soccer and basketball. During the pilot study many informal games with rules were observed, including chasing games and games which used equipment such as cricket bats and soccer balls and appeared to imitate formal games. These less formal games with rules seemed to be played by younger children around the edges of the formal play of older children. The key to categorizing play under this heading is the notion of winners and losers and the obvious element of rules governing the play. A short period of observation will reveal whether children are engaged in competitive play and whether they are following rules. These rules may be negotiated as the play progresses in some cases, particularly the less formal games with rules.

- Chants and Rhymes, usually related to skipping, discussed by Opie and Opie (1959), Piaget (1965), Sluss (2004). None of these was observed in the pilot study. Play which would be categorized under this heading would include
audible singing of chants or rhymes which is incorporated into the play, for example a skipping or clapping game.

- Rough and Tumble as described by Blurton-Jones (1967), Pellegrini (1989a), Bjorkland and Brown, (1998). Quite a few examples of this type of play were observed during the pilot study. This type of play is not fighting and includes the characteristics described by Blurton-Jones and outlined in the literature review chapter of this study. Even though this play may be interrupted by a teacher on yard duty, as is often the case, and may be described by the teacher as fighting, if it contains the characteristics described by Blurton-Jones, it will be listed in this category.

- Imaginative games involving role play, usually with props. Smilansky (1968), Smilansky and Shefatya (1990), Frost (1992), Jones and Reynolds (1992). A lot of play observed during the pilot study fell into this category. Without knowing intimate details of the play it was obvious that children were engaged in role play when they were imitating movements of other creatures or communicating with noises other than words. Other examples included playing with props such as small cars in a dirt patch and making noises associated with cars. There was great variety under this heading however it all involved children playing in imaginary circumstances. Any observed play where children are obviously playing in an imagined context will come under this heading.

- Popular fads influenced by a school program eg Jump Rope for Heart or by a TV program or other current trend described by Rivkin (1995). No examples of this were observed during the pilot study however the researcher decided to include it as a category in the major study as during her own experience in school playgrounds she had observed it on many occasions. An example of this is when a sporting event is gaining wide media coverage and children’s play is influenced by the event, usually by imitation with commentary imitating the actual sporting event. Any play which has been directly influenced by popular culture in the form of characterisation or settings or activities will come under this heading. The type of play often described as super-hero play where children imitate actions of characters they have seen in movies or on television, would come under this heading. If it involved rough and tumble play it would also come under that heading. If the observed play involved characters who are taken from a movie or television program for example, and are then placed into a context created by the children, it would be under both headings of Imaginary and Popular. There may be times when this would be impossible to
know without prolonged observation of the play episode and it is then beyond
the scope of this study.

• Scientific-sensory, involving experimentation to gain understandings of the
physical world, eg digging drains and watching water flow; constructions in the
sandpit. Researchers have described aspects of this category but it hasn’t
been previously grouped in this way. Froebel (1826), King (1979), Rivkin
(1990), Frost et al (2001) all discuss the fact that young children learn many
things through sensory experiences. This new category takes this notion
further. This play category includes any activities where children are
experimenting with natural materials they have found in the playground to
investigate their properties. It is likened to a scientific experiment conducted to
understand the properties of the natural world, for example a child playing in
this way may be wondering what will happen if I throw this rock at the fence?
Will the rock make a hole in the fence? Will the rock break apart? Will the rock
bounce back and hit me? The child will then throw the rock and based on what
happens, the next question will be formulated in the child’s mind. The
possibilities are endless, he may choose to throw the same rock again only
with more force or he may choose a different object to throw. This type of play
could also include children playing in water and learning about its properties. It
may also be play involving investigation of plants. This play will always involve
a search for understanding and although it could be argued that it will be
difficult to know the motives, the researcher believes, from past experience,
that it is a worthwhile category to include.

• Illicit – playing in out of bounds areas and deliberately breaking playground
rules, involving risk of being caught and punished, described by Blatchford,
(1989). For every school this will vary as playground rules are contextualized.
In order to understand whether play should be categorized as Illicit it is
necessary to know where out of bounds areas are as well as the rules of the
playground governing behaviour and use of equipment.

Reliability and Validity of categories

This was established during the pilot study when four teachers were asked to read the
description of play categories. They were asked if descriptions were clear and whether
they would be able to use them to categorise observed play in the playground. Each of
the teachers was asked separately and their comments compared by the researcher. The descriptions were then refined and again give to the teachers to read.

### 3.16 Major study

The resultant design for the major study had five phases of data collection.

**Phase 1**  Mapping and photographing and describing playspaces

**Phase 2**  Observations and field notes in the playground

**Phase 3**  Interview with principal

**Phase 4**  Teacher questionnaire/discussion

**Phase 5**  Interview with focus group of children and artifact collection

### 3.17 Data analysis

Careful analysis of each method in relation to other methods and also in relation to the demands of the research questions will enhance validity and confirmability (Brewer and Hunter, 1989, p 83-4). After data collection the following sequential steps, organizing, summarizing and interpreting will help with data analysis.

**Organising**

Data will be organised separately for each school. Themes will be drawn from the interview transcripts of principals, the questionnaires of teachers and the group interviews of the focus group of children. These themes will be determined by the research questions and data from each school will be gathered together under the following headings:

1. Ways the current school policy impacts in the playground.
2. The rules of the playground and their enforcement.
3. Playspaces and equipment in the playground.
4. Principals’ and teachers’ perceptions of the importance of outdoor play.
5. Styles of supervision and the impact on play.
6. Descriptions of playspaces and observations of play in each playspace.
In order to build a detailed picture of each playspace a landscape map of the school playground will be included for each school and will show where each playspace is in the playground in relation to other playspaces. Although not drawn to accurate scale, the landscape map will also give an indication of the size of the playspace in relation to other playspaces. There will also be one or more photos of each playspace so that the reader can see what each playspace looks like.

As part of this process of organising, data collected during playground observations data will be visually displayed as well as described. For each playspace there will be two bar graphs. These graphs will be colour coded to facilitate comparison. These graphs are simply a way of visually displaying and organising a large amount of data. One graph will show the play categories observed in the playspace during the observation period and will also indicate the number of players observed engaging in each type of play during the observation period. An example follows. In addition to this visual representation of the play categories, there will also be brief written examples of each of the play categories observed in the playspace. Many of these examples will be drawn on during discussions of this study.

![Bar Graph Example]

The other graph will be colour-coded to show the gender of players and the number of players observed in this playspace. An example follows.
Summarising

A written summary of each playspace will be included and will link together data from each of the sources which is relevant to this playspace. For example the principal may have commented on safety concerns about equipment in this space or a teacher may have described supervision issues in this area or children may have discussed this area in their descriptions of the playground. Such information will also be linked with observations in this playspace in the written summary.

A summary of results for each school will follow the results for each playspace. This summary will have the following headings:

- Types of play.
- Gender of players.
- Age group of players.
- Numbers of children playing.
- Allocation of space.
- Playground supervision.
- Principals' perspective.
- Playground rules.
- Changes in the playground.
Following the summary of results for individual schools, a comparison of results across all schools will be made under the following headings with the results from teacher questionnaires tabled for ease of reading.

- Ways the current school policy impacts in the playground.
- The rules of the playground and their enforcement.
- Childrens’ drawings from the focus groups of grades 2 and 3 children in each school.
- Group interview responses.
- Playspaces and equipment in the playground
- Types of play.
- The importance of outdoor play.
- Styles of supervision and the impact on play.
- Table 1. Number of staff involved in the formation of playground rules.
- Table 2. Teacher ratings of the importance of outdoor play.
- Table 3. Teachers’ views on their playground supervision styles.
- Table 4. Time spent by teachers in supervision of playground per week.
- Table 5. Teachers’ views on positive aspects of yard duty.
- Table 6. Teachers’ views on negative aspects of yard duty.
- Reasons why children miss outdoor recess breaks

Interpreting

This study will be interpreted and discussed around the following questions:

1. Introduction and discussion in relation to the aims of the study. What is interesting, new, expected, surprising, significant and what are the implications?
2. What factors are influencing current playground policy?
3. What impact is current policy having on children and their play in the playground?
4. What are childrens’, teachers’ and principals’ perceptions of the playground and the play occurring there?
5. What types of play are children engaging in at recess breaks in the playgrounds in this study. Are all types of play evident in each playground in this study? Do children who live in inner city high density housing play differently to children living in middle-suburbia or new growth areas? Does the socio-cultural background of the children in the school influence play choices?

6. What types of play are children engaging in at different age levels in the playground?

7. Are there different priorities for playgrounds when a school has a rapidly increasing student population compared with a consistent enrolment?

8. How is school playground design impacting on children’s play? Is the allocation of space and the arrangement of space a significant factor in children’s play opportunities?

9. How are children using equipment and playspaces? Are teachers and principals aware of how children use playspaces and equipment?

10. What is the impact of teacher supervision styles on children’s play.

The following chapter displays the data collected for each of the three case study schools. The data is compared and contrasted so that a clear picture of the playground of each school can be seen. Similarities and differences around the influences impacting on playground policy in each school are illuminated, ready for interpretation.
CHAPTER 4: RESULTS

4.1 School case studies

The results have been presented in the form of three case studies and examine closely the playground experiences of children from three schools. The schools were selected by purposive sampling to represent a diversity of settings, these are: 1. A suburban school established for more than ten years with a steady enrolment; 2. An inner old city school located in high density housing; 3. A school in a new growth area with a rapidly growing enrolment.

Initially the results will be presented for each school separately. This will be followed by data which provides comparisons between the three schools. Each school case study will be presented under the following headings 1 to 6 and the dot points under each heading indicate the data sources.

Ways the current school policy impacts in the playground
- Principal's views-data collected during interview.
- Children's views-data collected during focus group interviews.

The rules of the playground and their enforcement
- Principal’s views-data collected during interview.
- Teachers’ views-data collected via questionnaires.
- Children's views-data collected during focus group interviews.

Playspaces and equipment in the playground
- Principal's views-data collected during interview.
- Teachers’ views-data collected via questionnaires.
- Children's views-data collected during focus group interviews and supplemented with children’s drawings.
- Playground observations.

The importance of outdoor play
- Principal’s views-data collected during interview.
• Teachers' views-data collected via questionnaires.
• Children's views-data collected during focus group interviews.

Styles of supervision and the impact on play
• Principal's views-data collected during interview.
• Teachers' views-data collected via questionnaires.
• Children's views-data collected during focus group interviews.
• Playground observations.

Descriptions of playspaces and observations of play in each playspace
• Photographs, playground mapping, data displayed in graphs showing types of play, number and gender of players.

Comparison of teachers’ involvement in development of playground policy, supervision duties, their views on the importance of outdoor play and their role as teacher on yard duty
• Teachers' views-data collected via questionnaires.

4.2 School 1

Middle suburbia, established more than 10 years

This school is located in a north eastern residential suburb of Melbourne. It was established in 1962. There are currently 281 students and 15.4 teachers. Student numbers have increased in the past three years from 238 in 1999 and 256 in 2000. Children either walk to school, ride bicycles, are driven or catch a suburban bus.

During the interview with the principal it became evident that student wellbeing is a particular emphasis of this school. However in the staff room, there was little conversation and staff seemed tired and stressed. The weather was hot and the staffroom was stuffy with no air conditioning. All staff, both teaching and non teaching, is rostered on yard duty for four 50 minute blocks per week.
**Characteristics of the school**

The school grounds provide a very welcoming first impression. The buildings and grounds look well maintained. There are many large trees, both deciduous and native. Around the boundary of the school is a fenced corridor planted with native shrubs and trees. This area is referred to as the “banks” and is out of bounds to all children. Several garden beds with flowers in bloom form borders around the school entrance. The grounds are undulating and there are expansive views, to the east, of the surrounding suburbs.

1. **Ways that current school policy impacts in the playground.**

**Principal’s views**

At school 1, the principal indicated that changes had been introduced which no longer saw the need for separate classroom and playground policies. He explains, “Look, there’s not so much policies as such…there were playground rules but that’s been taken over by the identification of the values of the school. We tend to relate back to responsibility, care and conduct and respect, that are our school values.”

He pointed out that the government education department was not involved in the formation of school playground policy saying, “The major issue in terms of the Department is that there is a duty of care…which is over and above what parents exercise.” He also added that schools are responsible for the maintenance and safety of all playground equipment in line with Australian safety standards.

In response to the question asking what has influenced the timing of recess and lunch breaks in this school, the principal replied that it was difficult to make any timetabling adjustments, suggesting that the current timetable had been in place for a long time and there was a reluctance by staff to change, “Well its historical. I must admit we tried to review it a while back and…didn’t get too far.”

School 1 allows children to spend recess and lunch breaks indoors by choice. The principal demonstrated a willingness to listen to the children and to make arrangements which would cater for their needs as he perceived them:
This is probably my initiative. We make sure the same kids don’t stay in all the time. I really value the fact that kids have to go outside. But sometimes kids may want to stay in and finish what they are doing on a computer. Some kids will listen to music and stuff like that and…um…we do allow them to do that under supervision. We do allow the kids to stay in if they’ve got other activities that they want to do. Sometimes they just don’t want to go out and I think that’s fine.

2. The rules of the playground and their enforcement.

Principal’s views

The principal of School 1 discusses the shift from a separate set of rules for classrooms and the playground to a new approach involving the school’s values, therefore, very few rules in the playground are now required. He does, however make an extensive list of playground rules which are not new but are now explained from a new perspective:

We are trying to move towards relating what happens…to those school values all the time…The one rule in the yard is that the banks areas are out of bounds…Obviously climbing trees is not safe therefore we address it under that. Obviously throwing stones at someone is not safe but we tend to treat under those values because we are trying to build that whole concept of values up with the kids. We don’t have specific rules except for the boundaries.

In response to the question about enforcement of playground rules, the principal explained, “they [the children who break a rule] are usually sent in and they are taken out of the yard and occasionally we will sit them in the yard on a seat but generally it stops after a warning otherwise they’ll be sent to me.”

The principal also insists that safety concerns have not driven changes in the playground,

We’ve had our injuries at times and obviously you look at the safety of equipment. That hasn’t been the impetus for changing the play equipment but never the less we constantly look at the safety of our play equipment. No there’s been no particular incident that impacted on playground rules apart from, I suppose, when I first came we
had a number of integration children, so the number of people outside supervising has probably changed since I came. We now have more adult supervision.

Children's voices

Three boys and two girls volunteered to participate in this group interview and each had written permission from their parent/guardian to participate. During the focus group interview, the children explained the allocation of playspaces to different age groups and the out of bounds areas. In their own words they explain the school playground rules.

Child 1. “Be careful. And also, don't go on the oval unless you are grade 2, but you can only go on Friday, but- if you’re a grade two, but grade threes and higher can go any day they want.”

Child 2. “Umm, you’re not allowed, like, down near there, it goes sort of underneath where there’s really long grass and you’re not allowed down there because of snakes.”

Child 1. “No, they’ve taken out the snakes.”

Child 3. “But there’s holes in the fence and people climb through it. And you’re not allowed to go down there.”

Child 1. “They should just fence it off.”

Child 3. “And umm, up near the shelter shed people are playing bat tennis, there is the gate that they can come through. And people’s tennis balls can roll under and then it rolls on to the road. And they should put some chicken wire.”

Child 2. “We shouldn’t go in the car park because you could get run over by a car and umm, you still shouldn’t go in the banks because there still might be some stranger there.”

In the examples above, the children explained the need for each rule as a safety issue. In the two responses below, there is a shift to a focus on the school values described by the principal.
Child 1. “And you’re not allowed up in trees because you could fall out. Yes, and you could also rip your clothes with the branches if they’re sticking out and you could hurt yourself… And, care for others.”

Child 2. “And you have to let other people play in your games. Include other people.”

In the response below, the issues of safety, care and concern for others are intertwined.

Child 2. All, I think. I think all of them, because you could either make someone sad, you could get badly hurt….and it also hurts a lot of others, and when you don’t let people play it also hurts a lot of other peoples feelings if you don’t let them play.

One respondent argues that the rule banning tree climbing is not necessary, another argues that it is:

Child 3. Like, if you be careful, umm, if you could climb trees carefully- really, really, really well.

Child 2. No, I think that rule should stay. Even if you’re the best climber you can always slip. Only if you have these things that like, you slip your hands through and they’ve got spikes. You can’t slip with them.

Child 3. Yeah but I’ve always been climbing trees at my grandma and grandpa’s house.

Child 3. I know how you can suggest a rule. You have to report to Mr W first. You go to the school council. You tell one of the people in there. And, they’ll try and make that rule.

The children explain the consequences of breaking a rule in the playground,

Child 1. Sometimes they get sent to Mr W if they break the rule really, really, really badly.

Child 3. Like climb a tree right to the top, and then fall down and break their neck.
But sometimes they only, when they just fall to the bottom or just go down the banks they just get told to get off it or get told to get out. They still get a warning by the teacher because the teachers that have seen them have to tell their teacher.

3. Playspaces and equipment in the playground.

Principal’s views

The principal of School 1 describes some of the changes to playspaces and fixed play equipment he has initiated in the playground,

We had a huge water pipe which was a tunnel. We had to take that out. We had tyres in the school yard. We took those out because they were inappropriate. A lot of the old play equipment was treated pine, we’ve actually replaced all that. We haven’t been told to take those out but certainly it’s recommended by government and most schools are moving towards doing that. All play equipment is up to date so I don’t think that’s a major issue.

The principal also explains that in this school, students have also been a force for change,

Junior school council decided that they’d like to raise some money and actually get that refurbished…for their own room…so it’s a fun room for them. There’s pool table in there and a couple of games. That was their initiative.

Children’s voices

During the focus group interview the children from School 1 describe the same changes as the principal but from their perspective. They speak about their likes and dislikes in the playground.

Child 1. I especially like the old one, but when they put the new one I just felt so, so crazy, I was like, I want the old one back…because you could climb across and I especially like the tyres where you could climb over or climb through.
Child 2. I like the old one that he was talking about, the wooden one, because I can find lots of snails there...and there were lots of other insects exploring around there...they've taken the bits away they hide in.

Child 1. Mostly people get hurt on the new equipment.

Child 3. I just want to play somewhere private because what I don’t like is the places where there are too many teachers around.

Child 1. The only change I’d like to see in my whole life is to get the old playground back. The horse was so cool.

Child 3. I know. I loved the horse...it was like a big, giant log the size of this table and they used to sit on it and do umm, a weird game...and when ever we played it, umm, it’s a bit like musical statues but not so much...it was just a log on four legs...and it had legs in the middle to support it and it was why everyone called it a horse, because that’s what everyone called it.

Child 1. All the wooden equipment was removed because I think it was all old and I think it spread diseases.

Child 3. I like the new playground. The only thing about the old playground that’s bad, they need to rebuild it. Instead, they could rebuild it so it looked better, because it looked all dull. They could’ve painted it then it would’ve been even better.

Child 3. I like the bright colours of the flowers, and especially the umm, the smell from the lavender. Which I always pick one after school and give it to my grandma. The reason I like the bright coloured playground is because then its not just green and its got different colours in the mix. Lots and lots of different bright colours. And theres no more brown, because of the playground and the wooden horse thing.

The children describe their favourite play spaces.

Child 1- Mostly I like to play in the sand pit and around the rocks area. But, and also I sometimes I just wander around because sometimes my friends don’t let me play games with them.
Child 2- Soccer, kicking, all sports games, running around, all of that.

Child 3- Sport, up and down the oval and then up in the shelter shed I play. We just have talks and go look for animals like little insects. I look for those just behind the shelter sheds and up near the steps...or we look down near the playground as well. Or up near the trees and there’s heaps of umm, bugs with nippers in the sand pit and I’m really scared of them. Its coz of earwigs, they nip. I’ve caught a skink before.

Child 2. Umm, just down there on the ashphalt I usually play down there. Because it’s a large space and I can run around and many people play there and we play games there.

Child 1. I like the old one that George was talking about, the wooden one, because I can find lots of snails there. And there were lots of other insects exploring around there. And I also like up in the shelter sheds.

Child 2. There’s lots of umm, there’s like, concrete on the side where little things go underneath, lots of insects go under there.

Child 1. I also like up on the side, at the back of the shelter sheds in the corner because you can find a lot of butcher boys there.

Following are examples of drawings done by children in the focus group. They were asked to draw favourite things about their playgrounds and things they like to play in the playground.

*Figure 22 - Picture one of the horse drawn by children from grade 2/3 focus group in School 1*
Figure 23 - Picture two of the horse, drawn by child from grade 2/3 focus group in School 1.

Figure 24 - Picture of imaginative play, drawn by child from grade 2/3 focus group in School 1.
4. The importance of outdoor play

Principal’s views

The principal of this school describes a range of play types which the children engage in. These include the grade 6 buddies playing with prep children in areas normally only available to junior grades. He also explains that children are not forced to go outside at recess breaks.

The principal values outdoor play very highly, describing the benefits of physical activity and social interaction.

It’s absolutely crucial. I think it gives, apart from the physical aspect of it which I think is really important, it develops the children’s social skills in an environment where they are not constantly, totally supervised by an adult. I think that’s really really important. It develops their ability to actually play with other kids of their own age and outside their peer group and I think that’s really important. I think one of the aspects…it gives them a chance to move around, that fitness aspect and the healthy aspect is really important. We’ve got a lot of climbing equipment in the yard and that’s really important
for developing a lot of those coordination skills, muscle tone etc so I think there is that physical aspect of it. But the main thing really is that it allows them to develop those social skills…interacting with other kids in a play situation or even just sitting down and talking and in an environment that’s not constantly supervised, I mean obviously teachers are out on yard duty but I mean in an environment where teachers are not constantly with them on a one to one basis. Kids learn by mistakes. You know, you learn to interact with people by having problems and talking through those problems. I think the playground is really important for allowing those sorts of interactions to happen…when there are issues, we talk through the issues.

Teacher’s views

Fifteen teachers took questionnaires and there were six respondents. Two described outdoor play as extremely important, one said there are health benefits, one believed it important for balanced development of the child, one saw it as an opportunity to release surplus energy and one said the outdoor environment is an important learning environment.

Children’s voices

The children describe their favourite play activities, and like the principal, focus on physical activity and social issues,

Child 1 Mostly I like to play in the sand pit and around the rocks area. But, and also I sometimes I just wander around because sometimes my friends don’t let me play games with them.

Child 2 Soccer, kicking, all sports games, running around, all of that.

Child 3 Sport, up and down the oval and then up in the shelter shed I play. We just have talks and go look for animals like little insects.

Child 4 When I can find no one to play with. Ahh, I just go look for other people, because then I’m usually friends with them.

Child 2 Yes, when my friends don’t let me play and I feel so lonely and I just walk around the school and try and find my sister and some people just try and help me but
most of my friends, Sam- just a few days ago, when I was feeling so lonely he said, ‘I’ll be your friend,’ and then the next day when umm, he said he said he hates me and then I knew he lied and he said that just to make me feel better and then I just felt so sad. A white lie.

5. Styles of supervision and the impact on play

Principal’s views

The principal of this school explains that he has increased the number of adults on playground supervision, providing one adult for every integrated student.

He also notes that bullying is not a big issue at this school however it does exist in the playground.

No it hasn’t necessarily been an issue here. I’m not saying it doesn’t happen…anybody who told you that would be lying…but its not a major issue here. Most of the kids are pretty open about telling us if there been an incident…and we then work through that. It hasn’t been a major issue to the extent that we’ve had to put extra people on yard duty

Teacher’s views

The six teachers all describe their roles in the playground a little differently. Two teachers see their role as policing, another two see it as supervising, one feels like a mediator, one a first aider and another, a problem solver.

Children’s voices

During the focus group interview the students spoke fondly of one teacher who joined in their imaginative play.

Mrs R. She was my favorite teacher in the whole school. Umm, and whenever I was playing umm, in the sandpit playing bakery cakes umm, she’d always used to buy a cake.
They also described the children who choose to walk around with the teacher on yard duty.

Some people just walk around the school with their teachers. Some people like my sister just walk around with every teacher.
Figure 26 - Landscape map of School 1. The map has divided the playspaces into 10 distinct areas.
Description of playspaces and observations of play in each playspace

Area 1

All of area 1 is out of bounds. It is referred to by staff and children as “the banks” and it extends around the northern, western and southern boundaries of the school and is planted with native shrubs in areas where there is a steep bank. This has been reinforced with wooden retaining walls.

Figure 27 - Photograph of Area 1 School 1.
**Figure 28** - *Number of players and types of play in Area 1, School 1.*

**Structured**

A game of chasey involving four grade 2 and 3 boys was observed on the edge of the oval and onto the banks area.

**Imaginary**

A large group of grades 3 and 4 boys and girls (eight children altogether) were observed engaged in imaginary role play over several observations, running, hiding, chasing and making loud animal noises.

Four grade 3 and 4 girls engaged in imaginative play involving role play among the bushes. They were crouching, hiding and running, making noises that animals might make. This was ongoing and observed several times.

**Scientific/sensory**

Four boys from grade 3 experimented with the size and shape of a piece of wood, using it as a skateboard. They would ride it as it slid along one of the permanent wooden retaining structures. This continued for three days, six observation sessions. The boys fell frequently at the beginning but by the final observations, had mastered the required skills.
Illicit

All of the play in this area is illicit as the banks area is out of bounds to all children in the school. However children who were waiting to take part in one of the structured games, played on the edge of the banks, which was permissible.

Five grade 3 and 4 girls were observed climbing and swinging from the bushes. It was not possible to be certain what type of play they were engaged in whether there was an imaginary component or whether it was just physical exercise, as they only played briefly then left.

![Figure 29](image.png)

*Figure 29 - The gender of players in Area 1, School 1.*

**Summary for Area 1**

As can be seen in figure 28 the most common type of play in this area was imaginative. There were also several incidents of scientific/sensory play which was ongoing. From figure 29 it can be seen that there was a fairly even mix of boys and girls in this play space. Figure 29 shows that players were mostly from grades 3 and 4 with some grade two children also. The principal saw this area as dangerous because of its proximity to the road and footpath, increasing the likelihood of abduction. He and other staff members also described it as an area where children could hide and
therefore not be properly supervised at all times. Because this area was out of bounds, it was a focus for teachers supervising in the playground. However the children only played in this area when there was no teacher nearby. Only a small percentage of the children in the playground played in this area. It is possible that more would have done so had this been allowed.
Area 2

This is a large grassed area at the front of the school (southern face). The children refer to it as the oval. There are soccer goals at either end. There is a roster system in place for upper grade levels to have access to this area and during the period of observations, grade 3 and 4 were allowed exclusive use of the oval.

Figure 30 - Photograph of Area 2, School 1.

Figure 31 - Number of players and types of play in Area 2, School 1.
Structured

Eighteen boys from grades 3 and 4 played cricket in this area. During another observation of boys from the same grade level, 20 played cricket, 4 played soccer and 2 kicked a football back and forward. During one observation, four grade 3 and 4 boys played baseball in one corner of the space. On another occasion, seven boys played soccer while they waited to bat in the cricket game.

Imaginative

The imaginative play that was observed was in the out of bounds area on the banks. It involved players waiting for their turn to bat in the cricket game. They would hide among the bushes and were waving sticks in the air.

Illicit

The imaginative play on the banks area between this area and the boundary fence.

Figure 32 - Grade level of players in Area 2, School 1.
Summary of play in Area 2

Although occupying a large part of the playground, the oval area was limited to children from grades 3 and 4 during the observation period. The play categories observed were mainly structured play with a few incidents of illicit and imaginative. Only boys chose to play here, with the games being traditionally male: cricket, soccer, football and baseball. This is a large open area with clear visibility for the supervising teacher. On the one occasion there was intervention, play was interrupted while some children ran inside to get hats. On one occasion the teacher on yard duty called to the cricketers to go inside and get their hats.
Area 3

Also on the southern side of the playground, this area contains a steep bank with shrubs and winding steps. It also includes a basketball court at the school entrance which has an asphalt surface and court markings painted on it. There are fixed basketball rings at each end of the court. The bushy bank section of Area 3 is out of bounds to children.

Figure 33 - Photograph of winding steps leading down to basketball court, Area 3, School 1.

Figure 34 - Number of players and types of play in Area 3, School 1.
Structured
During every observation basketball was being played on the court area. The age group of the children was predominantly grade 3 and 4 and mostly boys.

Imaginary
Two grade 2 boys played imaginary games in the bushes beside the steps. They were hiding, crouching and springing out from behind a bush.

Popular
During one observation a boy from grade 3 played alone with power ranger dolls on the side of the basketball court. On another occasion he was joined by a boy from grade 3.

Illicit
Any play in the bushes is illicit.

*Figure 35 - Gender of players in Area 3, School 1.*
Summary of play in Area 3

Only boys were observed playing in Area 2. This area caters for games with rules and like area 2 is dominated by boys from grades 3 and 4. The type of play observed in this area did not change during the period of observation. The part of this area on the bank and planted with bushy natives would provide opportunities for imaginative play; however this is out of bounds. This is explained by the principal as both a visibility issue and also a desire not to damage the bushes. On one occasion the supervising teacher called to a basketball player to put on a hat.
Area 4

This area is in the south-east corner of the playground. It includes an asphalt netball court, a treed area with two shelters, two pieces of fixed equipment (climbing frames), a sandpit and an out of bounds area near the boundary fence. The children are not allowed to play among the bushes nor climb the trees.

Figure 36 - Photograph of shaded pathway in Area 4, School 1.

Figure 37 - Photograph of fixed equipment designated for children from Prep grades 1 and 2 in Area 4, School 1.
Notice in Figure 38 that it is cool and shady in the hot weather and small stumps of wood have been placed under one large tree for seating. The grass in the space has been worn away due to frequent use.
Structured

Five grade 1 girls and three grade 2 girls played basketball together on the basketball court. This was observed every day.

Two grade 2 girls played “stop/go” on the snail shell shape painted on the asphalt.

Rough and Tumble

Four grade 2 boys engaged in rough and tumble play on the grass under the trees.

Imaginary

Three girls from grade 2 role played under the shelter, they had dolls as props. This was ongoing over all observations and sometimes another girl would join in.

Eight girls and boys from grade 3 and 4 role played a game involving swinging on the fixed equipment.

Six grade prep girls role played a game during which they would run around the bushes.

Two boys from grade 2 were role playing birds nesting in the bushes. This involved flying around collecting twigs and placing them in the bush.

Four grade 3 and 4 boys played a game about horses which involved climbing on a large rock, collecting grass jumping down for the rock and running around the area. All players appeared to play the role of horses.

Ten grade 2 and 3 girls played a role play game on the fixed equipment.

Scientific/sensory

Three boys and three girls played together in the sand, digging, talking and laughing.

Four girls and three boys from grade 3 picked flowers and grass and arranged them on the seats under the shelter. They examined them with a magnifying glass.

Illicit

Three boys from grade 2 carried branches under the fixed equipment and lay them on the ground. They were gone the next day.
Summary of play in Area 4

Although this area is no larger than areas 1, 2 or 3, it contains a diversity of equipment and spaces. A large number of children play in the area with an even mix of boys and girls from grade prep to grade 4. Grades 5 and 6 children are not allowed to play here unless it is with a prep buddy. A wide range of play types were observed but mostly imaginative play. Although no children were observed climbing trees in this area, it was evident by the smoothly worn bark and bare dirt around the trees that they did play in the trees. The boys playing the “bird nesting” play were asked by the supervising teacher not to wreck the bushes. They resumed play after the teacher was out of view. While observing in this area on one occasion a child called to the supervising teacher “hey, where’s your hat?”

**Figure 40** - Gender of players in Area 4, School 1.
Area 5

This area contains a large expanse of asphalt on the eastern side of the school buildings with painted markings of basketball, downball and netball courts. There are also cricket nets with some surrounding grassed surface. There is a sand pit which is used during athletics practice as a long jump pit. There is no shade in this entire area. Children are permitted to play in all parts of this area.

Figure 41 - Photograph of Area 5, School 1.

Figure 42 - Number of players and types of play in Area 5, School 1.
Structured

On each day of observations, groups of boys played cricket in the nets. The grade levels were rostered to take turns. On one occasion a male teacher joined in the play with a group of five children from grades 1-4, two girls and three boys. On one day, twelve grade 2 boys played basketball on the court. A game of “cat and mouse” was played by six grade 2 children, three boys and three girls. They used the basketball rings as a “safe” place in the game. On one occasion four boys from grade 3 and 4 played “bat/ball” on the asphalt.

Rough and Tumble

Two Prep boys were observed engaging in rough and tumble play on the grass near the cricket nets.

Imaginary

Three Prep girls played a game involving role play but it was impossible to be completely sure what the play was about.

Scientific/sensory

Three girls from grade 3 and 4 played in the sand pit. This was ongoing play observed on four days. Three other grade 3 and 4 girls joined this play on one occasion. Three boys from grade 3 and 4 built with sticks gathered from the banks area nearby.
Summary of play in Area 5

This large area provided opportunities for a range of play types. Both boys and girls played in all spaces with more boys than girls present in the observations. The children observed ranged in age from prep to grade 4. All grade levels are allowed to play in this area. In the game of “cat and mouse” the players adapted their play to suit the space provided. This is also true of the long jump pit where children engaged in scientific/sensory play over several days. No teacher intervention was observed in this area.

Figure 43 - Gender of players in Area 5, School 1.
Area 6

This is a fixed pine structure surrounded by a sandpit. There is very little sand. A few tyres lay behind the structure. The area is covered with a shade cloth sail. This area adjoins the north boundary fence of the school. All grade levels are permitted to play here.

Figure 44 - Photograph of Area 6, School 1.

Figure 45 - Number of players and types of play in Area 6, School 1.
**Imaginary**

Five grade one girls played a role play game on and inside the fixed structure. Each child played a character and the play involved dialogue between characters. There was little physical activity.

On another occasion four Prep boys played inside the structure. They were hiding and chasing and crawling through the space.

**Scientific/sensory**

On two consecutive days a group of six boys from grade 2 and 3 threw a variety of objects up onto the shade cloth and observed and predicted how fast and where these objects would slide to the edge of the sail. They waited below ready to catch the objects. Things they used on the first day were found around the area, eg stones, balls but on the second day they brought objects from home such as toys with wheels.

![Figure 46 - Gender of players in Area 6, School 1.](image)

**Summary of play in Area 6**

This small area was not used by many children however the types of play observed here were not observed in many other play spaces in this playground. The use of the space did change during the observation period as did the age group of the players.
Only one girl was observed playing in this area. There was no teacher intervention observed in this area. On seven consecutive days there were no children playing in this area.
Area 7

This area consists of a fixed climbing structure surrounded by wood chips. It has some natural shade from the nearby trees in the late afternoon when children have left school. Children are not permitted to climb over the fence onto the banks area nor climb any of the trees. Grades prep to grade 4 are permitted to play on this equipment.

Figure 47 - Photograph of Area 7, School 1.

Figure 48 - Number of players and types of play in Area 7, School 1.
Rough and Tumble

On six consecutive days a group of seven girls and six boys from grade 2, 3 and 4 played a rough and tumble game on and around the climbing frame. It involved pushing and wrestling, jumping down from the frame onto other children. No children were hurt during observations and this did not appear to be the intention of the players. They laughed loudly during all observations.

Imaginary

On the final three days of observations, two boys and five girls from grades Prep and grade 1 played a role play game on the equipment. They appeared to be animals as they were making noises like monkeys. They chased each other around the equipment and this involved much physical activity.

![Figure 49 - Grade level of players in Area 7, School 1.](image)

Summary of play in Area 7

This area was used by both boys and girls across a range of grade levels. Both boys and girls played together in this space. The play observed in this area was not what the equipment was designed for. Children used the space and equipment at their disposal for their own purposes. The use of the space changed dramatically during the period of observation. Both episodes of play were ongoing over several days.
Area 8

This is a grassed area with a large eucalypt providing shade. In the central area under the tree the grass has been worn away. There is shade from the tree in the morning before school and at morning recess during summer.

![Figure 50 - Photograph of Area 8, School 1.](image)

![Figure 51 - Number of players and types of play in Area 8, School 1.](image)
Structured

A group of twenty grade 5 and 6 girls and boys played rounders in this area on one day. A group of about twenty grade 2 and 3 boys played soccer in this area most days.

Scientific/sensory

Three grade 2 boys gathered at the base of the large tree and appeared to be exploring the bark of the tree. A supervising teacher called out to them saying, “Don’t pull at the bark off that tree.”

![Figure 52 - Gender of players in Area 8, School 1.](image)

Summary of play in Area 8

During the observation period this space was used for games with rules, soccer and rounders. Although a few girls played in the rounders game, most players in this area were boys. Again, the teacher intervention involved the policing of children wearing hats, even though the weather was cold. On one occasion the supervising teacher asked, “where’s your hat mate?” The child without the hat tied his jumper around his head and kept playing.

Another day the teacher said, “P…, too rough, remember no tackling.”

A teacher commented to the observer, “I feel like I'm a prison warden trying to get them to wear their hats when it’s cold.”
Area 9.

This asphalt area in the north east corner of the playground has painted “4 Square” courts on it. It is an area for the grades 5 and 6 children only. It surrounds a shelter shed which the grades 5 and 6 children have refurbished with pool tables and other games for their use. There is no shade and no areas which are out of bounds.

![Figure 53 - Photograph of Area 9, School 1.](image)

![Figure 54 - Number of players and types of play in Area 9, School 1.](image)
Structured

The players in this area are mostly grade 5 and 6 children. Only one child from grade 3 was observed here playing. The gender mix is fairly even with slightly more boys using the downball courts.

The other play enjoyed by children in this area is inside the converted shelter shed where pool is played by children of both genders.

Rough and Tumble

On one occasion boys were observed engaging in rough and tumble play, using bats as guns. The asphalt surface was not as comfortable to roll on as grass however no players were injured.

![Graph showing gender distribution by grade level.](image)

**Figure 55 - Gender of players in Area 9, School 1.**

Summary of play in Area 9

This area was used by grades 5 and 6 who had been integral in the design of the shelter shed area. While not all children from these grades played here, the majority did but were not always visible if they were in the shelter shed. The shelter shed area encouraged socializing as well as playing pool and the downball area was also constantly in use by both genders. There was no teacher intervention observed.
Area 10

This area is at the western end of the school grounds. It is the largest area of grass and shrubs in the playground and contains a large, steep bank and a set of steps leading up to a gate. On either side of the steps are wooden retaining walls and the plantings are native shrubs. These areas are out of bounds. The ground underneath the bushes is well worn and there is evidence of children’s play.

Figure 56 - Photograph of steps in Area 10, School 1.

Figure 57 - Photograph of banks in Area 10, School 1.
Rough and Tumble

On two occasions, a group of four boys from grade 2 and 3 were running through the bushed area and engaging in rough and tumble play.

Illicit

Although the steps were not out of bounds, children were not permitted to slide down the rails or swing on them. This was a popular activity with groups of girls from grade 3 and 4 or grade 5 and 6 often observed engaged in this activity.
Summary of play in Area 10

In Area 10 all play was illicit and rough and tumble. Although some boys played here it was mainly used by girls from grades 2 to 6. It was evident by the flattened grass and bare dirt areas among the bushes in this area that it was well used by children. On a number of occasions children were observed running among the bushes engaged in rough and tumble play. There was usually a group of girls gathered on the steps sliding down the rails or swinging on them. Both genders played among the bushes but only girls were observed gathered on the steps. No teacher intervention was observed, the steps providing a good vantage point from which to observe approaching teachers.

4.2.1 Summary of School 1 results

Types of play

The principal believed that the children’s play centred on physical activity and socializing. Observations of their play revealed that not all categories of play were well represented in this playground. Structured games with rules were observed in six areas, imaginary play was observed in seven areas, scientific/sensory play was observed in five areas and rough and tumble play was observed in four areas. No example of Chants and Rhymes were observed. Illicit play was observed in four areas and always involved children playing in the banks or garden areas. In these areas they were engaged in either imaginative play or Rough and Tumble play.

During the focus group interviews the children described the type of play they most enjoyed and for each child this was quite different, including running in large open spaces to playing in the sandpit. A range of types of play were reflected in the drawings done by the children in the focus group about things they like to play in the playground.

Gender of players

In nine of the playspaces players of both genders were observed playing. The only area where girls were not seen was Area 2, the large grassed oval. However in some of the areas, one gender was dominant, such as there was a dominance of boys in Areas 2, 3 and 6 and in Area 10 only girls gathered on the steps. Children had not
been excluded from playing in any areas based on gender, however, they were excluded from some areas because of their grade level.

**Age group of players**

Some areas were allocated to different grade levels. Area 9, an asphalt area with painted downball courts, for example was set aside for children from grades 5 and 6 and area 3 was for grades 1 to 4. In general however, children were free to play in most areas.

**Numbers of children playing**

For the enrolment of the school, the playground was large and children have many choices of places to play. Crowding was not a problem in this playground. The areas where most players were concentrated was Area 3.

**Allocation of space**

Most of the large spaces in this playground are designed for structured games with rules; the large grassed area and the asphalt courts occupy most of the playground.

**Playground supervision**

The children spoke about one teacher who participated in their imaginary play, saying she was their favourite teacher. Over the period of observation, one teacher was seen to join in a game with the children. There were only four instances of teachers intervening in play in a policing capacity. On three of these occasions it was to tell children to get hats and on the other occasion it was an instruction to be careful of the bushes. There were no observations of bullying or fighting in the playground and no children were caught in out of bounds areas. The Principal had increased the number of teachers on yard duty when he arrived at the school. The teachers saw their role mainly as policing and supervising.

**Principal’s perspective**

The Principal demonstrated a willingness to listen to the children and to make arrangements which would cater for their needs as he perceived them. A system was
in place whereby children could advocate for change via school council representatives or speak directly with the Principal. The children interviewed felt comfortable with these opportunities.

**Playground rules**

In this school, there is a process established for children to question playground rules and this empowers them. Their discussions about rules and changes to the playground demonstrated that they had considered issues and were encouraged to have their own opinions. They didn’t always agree and yet were respectful of one another’s views.

**Changes in the playground**

The Principal explained that in this school, students have been a force for change. He described that the initiative of the grade 5 and 6 children in raising money to convert the shelter shed. He said that changes to equipment were not driven by safety concerns. His comments suggest that the practices of other Schools were a significant influence.

The children recalled fondly the old treated pine equipment which had been removed and explained a range of features they like about it; some drew pictures of the old treated pine “horse” which had been removed.
4.3 School 2

School 2. Inner city high density housing

This school is situated in a densely populated and culturally diverse inner city area. Sixteen languages other than English are represented, the most commonly spoken being Turkish, Slav Macedonian, Hmong and Vietnamese. All the children walk to school. The student population is currently 130 students, predominately drawn from the nearby Department of Housing estates. There are 13 teachers and 4 integration Aides. The school opened in 1874. It is one of Melbourne’s oldest schools. All staff, teaching and non teaching, and some parent volunteers are rostered on yard duty. Ancillary staff are employed to instigate and teach games in the playground.

Characteristics of the school

The most striking thing about this school playground is the activity and the noise. Children appear to be running everywhere in a confined space. The other very noticeable characteristic is that the noise is happy. There is a lot of laughter. In the staffroom there is a lot of happy sounding chatter among staff, including lots of laughter. The weather was hot but the staffroom was cool and air conditioned. On my first morning at this school the principal provided morning tea and she had taken considerable trouble with the preparation. All staff attended to meet me and hear about the study I was conducting.

The school landscape is sparse and barren with predominately asphalt surface. There is no grass. The two storey school building dominates the school grounds and by comparison the playground seems very small. The playground is surrounded by busy city streets and there is constant traffic noise. There are a few very large deciduous and native trees which provide shade over some areas of the playground. There is limited parking in the streets around the school so a portion of the playground is used as a staff carpark and is out of bounds to children. There is one small area which has recently been planted with native grasses and this is referred to as the “indigenous” garden. It is out of bounds to children while the plants are getting established.
1. Ways that current school policy impacts in the playground

Principal's views

The Principal of School 2 says that there are no specific outdoor policies written by the school. However she describes a program designed by the school which addresses playground behaviours,

_We have a stop-think-do program which the children will be trained in and the teachers carry around a folder and that you know, basically, if you see something that’s occurring, you say, ‘stop, lets think about what’s happened…now what will we do?’ So that’s one policy that impacts on their behavior and teachers’ behavior as well._

She also describes the Anti Cancer Council of Australia Sunsmart policy as one with strict guidelines which the school adheres to.

In relation to children spending recess and lunch breaks indoors, she says that it only happens occasionally and is mostly due to unpleasant climatic conditions of extreme heat or rain.

2. The rules of the playground and their enforcement.

Principal's views

The principal of school 2 explains the existence of unwritten rules in the playground, formulated by children and teachers in response to situations as they arise.

_... in a small school- again with no grass, I think children work out a lot of unwritten rules but the only thing we watch is for kids who are kicking balls you know, like soccer balls...too hard, or if the grade sixes started playing kick ball with a soccer ball, which if they kicked it really hard it would kill someone, so we just adapt as we go into that sort of situation, but no hard and fast rules, not at the moment except that you’re not allowed on the new indigenous garden which can be a bit of a pain._
The other out of bounds area in this school is the car parking space.

In this school, children who break playground rules miss out on play either by sitting in a time out area or walking with the teacher on yard duty. When asked about the consequences of rule breaking the Principal said:

_Umm, yes, we have, I said the yard duty teacher carries a folder and if you see a child doing something incorrect you write an incident report on it and, I collect them at the end of the week and try and engage a pattern, that sort of thing, otherwise you would sort of say, “go and sit over there for five minutes” or “walk with me”, those sorts of things._

Children’s voices

In this school, four boys and two girls volunteered and had written permission from a parent/guardian to take part in the focus group interview. During the interview only three of these children spoke. This may have been because of a difficulty with understanding English or may have been shyness. During the focus group interview, the children listed all the playground rules.

_No bullying. Umm…umm_

_No throwing sticks and stones._

_Umm…no teasing other people and not going on the same thing together, the same equipment._

_No speaking bad language to kids._

_Don’t damage other people’s property._

_Don’t spit._

_Don’t talk while the others are talking and when you’re playing a game, the other people won’t know what the game’s about._
The list of out of bounds areas given by the children identically matched that given by the Principal. They said they were not allowed behind the red line where the teachers park their cars, not on the road, not in the indigenous garden and not outside the school area.

When asked which rules were most important in the playground, the children in the focus group described rules which focused on care of one another, both physically and emotionally.

*Child 2.* Not to hurt other people because that’s really bad and they’ll get upset and…don’t throw sticks at other people, and stones because they’ll get hurt.

*Child 1.* Not letting other people play.

*Child 3.* When people say F words to other people- sort of like teasing but if they say a bad word to someone they, umm, and keep on saying it, it gets annoying and they get hurt with what you’re saying.

*Child 1.* Just like what he said, umm…not to throw sticks and stones but if somebody throws a stone at you, a rock or something…you can really get damaged in the head.

*Child 2.* Don’t damage people’s property… and then they could go into your school and complain about what happened and stuff.

*Child 3.* Don’t take things off people like if they have glasses don’t take them off.

3. Playspaces and equipment in the playground

Principal’s views

The principal of this school outlines the unique set of issues in the playground and the steps taken to address these,

…a lot of them will just sit. So, I try and, ‘cause I’m the PE teacher as well…. make sure they have enough balls… we actually have aids that go into the yard at different
times. Well, we have a few children that live together (in the same high rise housing flats)

She balances the advantages of a small asphalt playground with the disadvantages,

Its easier to keep an eye on everybody. I mean, if you have a playground with a big oval things can happen that are a long way away. Where as here you can basically sit in one spot and see everything that’s going on...Well, there’s not enough space, and there’s no grass. Although we’ve been very lucky with the injuries. I mean, we have days where kids were playing football this way, basketball that way, and then the little ones would be running across...

Children's voices

During the focus group interviews the children described their likes and dislikes in the playground,

...Monkey bars on the other side because umm, its fun getting on top of them but, a boy in a younger grade broke his leg jumping down but umm, just staying up there in the fresh air is nice, and swinging along them. Its all fun.

The bars. I was going to say monkey bars but they’re different bars...they’re just on napier st...it goes small and then it goes up to biggest and then its all bars, and umm..you get to do tricks on them. And there’s, you can make another rule. Somewhere on top of the play equipment and you have to say, 'do something umm, slip over and who ever does it the fastest gets a point.

During the interview, three children in the focus group described the downball area as their favourite place to play. The other three children did not speak. Fortunately all children drew pictures of their favourite play activities and for each of them it was Downball.
The children were specific about changes they would like to see to their playground,

_Child 1._ I would like to see some swings because _ummm,_ they’re fun and when you go _really high it’s like you’re flying, and nothing goes in your face._ And you get _cool and stuff._

_Child 2._ Umm…_the umm, a slide._ At Napier _there’s one slide,_ and when you _slide you hold onto the sides and then you go down and you can feel it tickle you, and then you touch somebody and it goes to the other person, and it stops._

_Child 1._ Some more _slides._

_Child 3._ Umm…_well…more downball courts because there’s already been one covered over with the cement going over it, but there’s another one down there but, Annie said she’d get Ray to paint one but I don’t know if he might, I don’t know if he _will…and there’s only one down there which the grade five and sixers always get._ And _there’s another one over on the side,_ so _now there’s like only one double court and five and sixers get it…so, we need more downball courts because we hardly ever get to _play on them._

One child voiced concern for the removal of a tree from the playground, another child _objecting to this suggestion,
Child 1 Umm.. there's lots of umm, like, trees... there's like one tree- and there's some ants coming down.

Child 2 They're bullants. They're in their habitat... so if they cut the tree.

Interviewer So you'd like to get rid of the tree?

Child 1 Yeah, so all the ants would come down and stuff.

4. The importance of outdoor play

Principal’s views

The principal in this school described outdoor play at school as one of the few opportunities these children have for such activity due to the nature of their housing. She explains that because most of them live in high rise flats they have not developed the physical skills to play games involving running. At this school, aides are employed to address this issue in the playground by initiating and teaching games.

Well, obviously fresh air is good even if it's polluted hahah... most of our kids live in flats so it's important that they get out and run around a bit more, which a lot of them don't have the skills to do. A lot of them will just sit. So, I try and, 'cause I'm the PE teacher as well... make sure they have enough balls... we actually have aids that go into the yard at different times. Well I think its participation isn't it? From sitting on the chair watching other kids play to actually being brought in to... do something and feeling part of a group and learning some skills.

Teacher’s views

Only four of the eleven respondents saw outdoor play as extremely important. One teacher said it was very important and one stated that it had health benefits, one said it was important for the balanced development of a child, one said it was an opportunity to burn off surplus energy and one said it was an important aspect of children’s learning to be able to play outdoors.
Children's voices

During the focus group interview at this school the children describe a wide range of games with rules which they like to play.

Umm…bomb. That’s where you have this pole and the tree, and you have lots of people playing and you…somebody’s it…and has to count on the tree or pole with their eyes closed…and the other people have to hide, and if the person that’s it sees the person that’s hiding umm, that person has to run and try and try and say ‘bomb’ and put their hand onto the tree or pole.

And the last person that makes it has to say ‘bomb save war’ or something…

We used to play this game…I don’t know if we all, but I used to like it a bit…umm…markers up where you have to kick the ball and somebody has to mark it and then that person goes up with the ball and then they have to kick it and the other person has to mark it.

I don’t know what this game is called but what happens is umm…theres one person down the end and theres, like, say if theres four people theres one person down the end and then the other three stay down the other end and umm, the, one of the people there says..umm, I don’t know…the person down there says umm…animal, say…and then the first person, say its…Jasmine…say if its anyone, sorry…say its anyone…make up that’s it Casey, say…and then Casey would have to say umm, her favorite animal is kangaroo, and then umm…another girl ..a boy probably Josh would have to say his favorite animal, probably…dolphin and then the other person would say like…koala…and then, umm…and you can also…if two people say the same animal say…koala one and koala two and then, the person down there says koala …koala…and then they’d run…and if the person makes it there before they do- before the other person does they have to go back there but if that one wins they go up there and then you start to play again…

Umm…its charades…they don’t like playing it, but I do. Umm…theres two ways of playing it but we play it the school way…the way we play at school…Umm, its where you umm, have these kind of umm, actions and umm, and if you do a film action then I say a film and you have to pick, a film.
Golden child

You have two teams. You have two captains, one in each team...ummm and one team is the running team. And the other team is the one that has to throw the ball to get the goal in the hoop.

And the running team has to run around the basketball court.

We used to play chasey, where someone is it and if they get you, you go to the fence and you wait then when someone runs past you and they tag you you can go again.

We made one, a chasey up, called ummm...v...dee-bee...and its just like chasey, but you tap them on the knee.

And sharkies. Another game which is chasing....

The children complain that they don't get enough time to play.

We don't get enough time to play, we only have half an hour at lunch time...we have one hour to play...

At lunch times when we play for an hour on Wednesdays just ummm...her...me, and him...and there's another boy in our grade...we ummm, we have to do a drums class with our ummm...our teacher that ummm, helps our normal teacher. And ummm, just for half an hour at 1.30 at 2 O'clock its part time which means we don't have enough time for play lunch, we only have half an hour....

Another area of concern raised during the interview is that of bullying.

Bullies. They're annoying and they push you around and ummm, and when you want to play they say No...go away...

Bosses. Like bosses in games because they tell you what to do, and stuff like, they say, 'oh you have to be it'and all that stuff and, and, and they also exclude people...if someone says, 'can I please play' they say, 'no you're too young'or 'its only for grade threes and up or grade fours and up' and its just rude and mean to the other kids.
5. Styles of supervision and the impact on play

Principal’s views

The principal of this school says that the “stop, think and do” policy in the playground has impacted on both teachers and students.

The principal also described a school initiative to address the needs of children in the playground. This school employs teacher aides who initiate ball games in the playground and teach children the relevant skills required to play. A large percentage of the children live in high rise flats and spend little time indoors.

…what they’ll do is they’ll create games. They’ll set up game situations and teach different rules, so that’s been really positive in the last couple of years for them…

It’s a great idea. We’ve got three young aids…one which is full time the others are usually part time but they’re not that far out of a playground themselves!

It doesn’t happen without teacher intervention. They go home and they sit inside. A good 70% of them would.

The principal has found that teachers don’t see their role as playing with the children in the playground and she believes this will become more common with the aging teacher population.

I mean, teachers do not want to go out in the yard at lunch time and instigate games. Its just, they’re not going to do it…especially now with the aging population we have in education. The other teachers might, they might go out and take t-ball practice but it just, it just doesn’t happen here…so having aids to go out and do that…to actually teach games and to be pro-active in getting games started is good.

Teacher’s views

Three teachers describe their role as policing, five as supervising, two as mediating, one as first aider and one as welfare officer.
Mapping of playspaces

Figure 61 - Landscape map of School 2.
Description of playspaces and result of observations of play

Area 1

This playspace is at the front of the school. The teachers’ carpark is out of bounds to children however children are allowed to play in all other parts of this area. The asphalt surface of the court is very rough and the painted lines are broken and difficult to see. This area is soon to be resurfaced with new asphalt.

Figure 62 - Photograph of asphalt Area 1, School 2.

Figure 63 - Area 1, School 2.
Some seating is provided beside the front school fence with limited shading provided by bushes. The area underneath the bushes is well worn. The wall of the school building has been painted with targets to encourage ball games.

![Figure 64 - Number of players and types of play in Area 1, School 2.](image)

**Structured**

Three grade 3/4 boys played a ball game with a basketball on several days. A small group of grade 2 boys were observed playing chasey on many occasions. A game involving throwing a tennis ball at painted targets on a brick wall was observed twice with four grade 3 boys playing and once with three grade 5 girls playing.

**Scientific/sensory**

Two girls from grade 2 scratched designs on sticks, crouching under bushes near the boundary fence.

**Illicit**

Four boys from grade 2 were climbing bushes. Four boys from grade 3 were playing “brandy” a game which is banned in this playground. It involves throwing a tennis ball and hitting any child to make them go out.
Popular

This was also an area where children played with swap cards. This happened every day of observations.

Figure 65 - Gender of players in Area 1, School 2.

Summary of play in Area 1

Because it is a large asphalt area without shade, there are limited opportunities for different types of play. The area was mostly used by boys. No teachers were observed intervening in children’s play in this area. A wide range of age groups used this area. Every day during the observation period a group of three grade 5/6 girls sat on the benches chatting. It was the same girls each day.
Area 2

This is a small playspace which offers some seclusion in this busy playground. Seats have been built and the surface is both paved and sand. Even though a large tree is growing in the middle of the area, there is very little shade during outdoor recess breaks. Children of all grade levels are permitted to play in this area.

Figure 66 - Photograph of Area 2, School 2.

Figure 67 - Number of players and types of play in Area 2, School 2.
Structured
An ongoing game of “downball” was played by seven grade 5/6 children, boys and girls. It was played over four days. This same group then played a game involving hitting a tennis ball against the wall. The same group with one more girl also played “downball” on another day.

Three grade 3 boys played a game of throwing and catching tennis balls to each other over two days.

Imaginary
Four boys from grades 1-3 played a hidey game where a toy was hidden by one child and the others searched for it.

Scientific/sensory
A boy and a girl from grade 6 spent many recess breaks peeling open large flowers which were growing on a vine over the boundary fence.

Popular
Four boys and one girl from grade 4 played a “Matrix” game based on the recently released movie. This game involved jumping from benches to the ground and role playing the characters in the movie. They played this for two days.
Summary of play in Area 2

Children from all grade levels played in this space. The use of the playspace did change during the observation period with the same group of children playing different structured games. This very small space accommodated three different types of play and many players. The play of each group of children did not appear to be affected by other players, for example, the “hidey” game was played in among the “downball” game without either being interrupted. Both genders were well represented in this space. No teachers were observed intervening in children’s play during observations in this area.

Figure 68 - Gender of players in Area 2, School 2.
Area 3

A shaded by large deciduous trees and there are many small wooden tables and benches.

*Figure 69* - Photograph of seats in Area 3, School 2.

Shelters have also been built which provide shelter from rain during the months when the trees are bare.

*Figure 70* - Photograph of shelters in Area 3, School 2.
Structured

During one observation, two grade two girls played chasey in this area.

Imaginary

A hunting game involving two girls and two boys from grade two, was played in this area. It involved one girl pretending to be a cat and the others were the hunters. Although this game moved around the playground it was predominately played in this area.

Scientific/sensory

Two grade two children spent many days looking in the bushes through magnifying glasses. On another occasion a grade one boy played alone, mixing dirt with a spoon.

A grade two girl also played alone busily collecting leaves.

Illicit

One grade two boy persisted with throwing stones in this playspace.
Rough and Tumble

One Prep boy and one grade 1 boy rolled in the dirt and played wrestling until reprimanded by the teacher on supervision who warned, “Be careful. Don't hurt him.”

![Figure 72 - Gender of players in Area 3, School 2.](image)

Summary of play in Area 3

This area was mostly played in by grade 2 children. A mix of girls and boys played here. A range of types of play were observed in this area and the use of the space changed during the observation period. Twice teachers were observed intervening in children’s play, once to tell a child not to throw stones and on another occasion to tell the boys engaged in rough and tumble play not to get hurt. In each instance the children stopped what they were doing immediately.

This area was also used for social purposes with grade 3 and 4 children, boys and girls, sitting and chatting together on many occasions. Grade 5 and 6 girls also sat and socialized in this area.

Teachers also used this as a time out place and on one occasion children were brought to this area from other parts of the playground and told to sit on one of the benches.
Area 4

An asphalt surface and along the border fence, small trees are growing. The dirt under the trees is well worn from traffic. There are some wooden benches which children sit on in the shade at breaktimes.

Figure 73 - Photograph of Area 4, School 2.

Figure 74 - Numbers of players and types of play in Area 4, School 2.
Structured

For many days of observations, ten grade 5/6 girls and boys played cricket in this area. When there was no cricket, a game of “chasey” was played in the area by three grade 2 girls. Two boys from grade 2 kicked a basketball back and forward in this area. On another occasion five boys from grade 1 played basketball in this space.

Scientific/sensory

On several occasions a grade 2 boy moved around the fence line collecting passionfruit flowers from a vine growing on the boundary fence.

Rough and Tumble

On one occasion two boys from grade 3 wrestled in the dirt near the fence for quite a long time. They were laughing.

Summary of play in Area 4

The play on the asphalt section in this area was mostly structured, changing from cricket to chasey to kickball. Both boys and girls played together in these games.
Along the fenceline children engaged in other types of play, scientific sensory and rough and tumble. No teacher intervention was observed in this area.

One boy from grade 6 sat alone on a bench over several days.
Area 5

The surface of area 5 is asphalt with clearly painted downball court markings.

![Figure 76 - Photograph of Area 5, School 2.](image)

A busy one way street is outside the wire mesh boundary fence. There is little shade in this part of the playground and no out of bounds places.

![Figure 77 - Photograph of boundary fence Area 5, School 2.](image)
Structured

Every day mixed gender groups from grades 4-6 played downball in this area.

Summary of play in Area 5

Over the period of observing, the play and the players remained the same in this area. No teacher intervention was observed.

On one day, ten grade 5/6 girls sat and talked in this area.
Area 6

Area 6 includes a piece of fixed play equipment and a large shady tree circled by wooden seats. The under surface is woodchips. All age groups are permitted to play on this equipment.

Figure 80 - Photograph of Area 6, School 2.

Figure 81 - Number of players and types of play in Area 6, School 2.
Imaginary

A chasing game involving a range of age groups and both boys and girls was played on the fixed equipment. There were twelve children involved. Children were role playing different animals and were swinging, climbing and jumping around the equipment chasing each other.

This graph shows that both boys and girls from grades 4, 5 and 6 played in this area and during observations, 2 grade 1 boys were also observed in the area.

Summary of play in Area 6

During the period of observation there was only one type of play observed in this area. This was a chasing game with players taking on roles of different animals. Players were from a range of age groups from grade one and older. The children used the fixed equipment in a way it was not designed for. They transformed it from a climbing frame to the setting for their “animal” game of chasey. This play continued for the duration of observations.
Area 7

An indigenous garden which is still being established is located in the area. There is a large eucalypt close to the boundary fence. A paved pathway winds through the area and children are permitted to walk on the path however are not allowed to play among the plants.

Figure 83 - Photograph of Area 7, School 2.

Figure 84 - Number of players and types of play in Area 7, School 2.
Structured

Two grade 6 girls played a chasey game which was on the pathway through this area. Four boys from grade 3 and five boys and girls from grade Prep played a chasing game which involved kicking a basketball, on the pathways in this area. On another day two grade 6 boys and one grade 5 girl played chasey through the area.

Scientific/sensory

On one occasion two grade two boys were digging in the dirt under the tree. This play ended when the supervising teacher told them to get off the garden. On another day four grade 4 girls were also digging under the tree.

Illicit

The two boys and the four girls digging under the tree were out of bounds.

![Figure 85 - Gender of players in Area 7, School 2.](image)

Summary of play in Area 7

This area catered for a range of types of play and was used by both boys and girls from many grade levels. This newly planted garden was a focus for teachers on yard
duty and children were often told not to walk on the garden. The children used this area in different ways during the observation period. Two grade 5 boys spent many recess breaks lying on seats in this area. During observations they were not communicating with one another.
Area 8

This is a small playspace with a boundary fence on one side and the wall of the school building on the other. Many children congregate around the drinking taps which are against the wall of the building. A temporary volleyball net sits in the centre of this space and a court has been marked on the ground.

Figure 86 - Photograph of Area 8, School 2.

Figure 87 - Number of players and types of play in Area 8, School 2.
Structured

Volleyball is played in this area. All grade levels except Prep are players and the gender mix is fairly even. On one day when there was no volleyball, one grade 6 girl spent time skipping here.

Imaginary

On the day when no volleyball was being played, four grade 1 girls spent the recess breaks dancing in role play here.

![Figure 88 - Gender of players in Area 8, School 2.](image)

Summary of play in Area 8

This very small space is designed for volleyball and was used for this purpose by both boys and girls from many grades. On the day that it was not used for volleyball, other children used the same space for different types of play. No teacher intervention was observed in this area.
Area 9

There is a small alcove area against the school wall and a downball court painted in this area.

Figure 89 - Photograph of Area 9, School 2.

Figure 90 - Number of players and types of play in Area 9, School 2.
Structured

Four grade 4 boys played downball on one occasion and five grade 3 girls played a kicking game with a basketball on another day. During another observation five grade 2 boys played a game involving kicking tennis balls.

Scientific/sensory

Two grade 2 boys and one grade 2 girl spent were observed playing with the large maple tree leaves which were being blown around this space by the wind.

During one observation three grade 2 girls and one grade 4 boy experimented with lifting and carrying each other. They tried various arm supports to manage the load.

![Figure 91 - Gender of players in Area 9, School 2.](image)

Summary of play in Area 9

Both boys and girls from grades 1 to 4 played in this area. They used the space in various ways. While some children played downball or kickball, others were playing with the leaves that had gathered there and experimenting with weight bearing activities. No teacher intervention was observed in this area.
**Area 10**

This area is in the middle of the playground and is a large asphalt area with a basketball court painted on it. There are permanent basketball rings at either end of the court. Very little shade falls on this playspace.

*Figure 92 - Photograph of Area 10, School 2.*

*Figure 93 - Number of players and types of play in Area 10, School 2.*
Structured

Boys and girls from grade 6 played downball during one observation.

Imaginary

A boy and a girl from Prep engaged in a role play about cats. One of the supervising teachers joined in this game and also took on the role of a cat.

![Graph showing gender distribution of players in Area 10, School 2.]

Figure 94 - Gender of players in Area 10, School 2.

Summary of play in Area 10

In this area children used the space in various ways. Both boys and girls played together here, from either grades 1 and 2 or grades 5 and 6. There was teacher intervention in this area during observations. On one occasion a teacher joined in imaginary play, taking on a character role. Another teacher reprimanded a child for kicking.

A supervising teacher sent a child to sit on a seat in this area and said, “don’t kick children who don’t do what you want.”

Older children intervened when a grade 2 boy hit a girl with a ball. They told the boy to apologise.
4.3.1 Summary of School 2 results.

Types of play
In this small, crowded asphalt playground all types of play were observed regularly. Although there was very little equipment, in nine areas, structured games with rules were seen. Imaginary play was observed in four of the areas while scientific/sensory play was seen in six areas. Popular play was observed in two areas and Illicit play was observed in two areas. No examples of Chants and Rhymes were observed. Even though there were no grassed spaces, rough and tumble play was seen in four areas. During the focus group interviews children described in great detail many structured games with rules. In the drawings done by the focus group, they all drew a downball court.

Gender of players
In most observations of play in this playground boys and girls played together. This was also pointed out by the Principal who believed this to be unusual.

Age group of players
Players from different grade levels frequently played together in this playground.

Numbers of children playing
All areas were very crowded. Games were often played over the top of another game. This did not appear to distract any players or interrupt any of the play.

Allocation of space
All grade levels were free to play in all areas of this playground. The only out of bounds areas are the indigenous garden and the car park.

Playground supervision
Supervising teachers displayed a policing role however one example of a teacher joining in play was observed. This is supported by their response to the questionnaire
where they mostly described their role as policing/supervising. The principal employed ancillary staff to initiate games because she believed the aging population of teachers was increasingly unprepared to play with children in the playground. However, during observations ancillary staff were not observed playing games with children.

Principal's perspective

The principal in this school described outdoor play at school as one of the few opportunities these children have for such activity due to the nature of their housing. She explains that because most of them live in high rise flats they have not developed the physical skills to play games involving running. At this school, aides are employed to address this issue in the playground by initiating and teaching games.

Playground rules

When asked which rules were most important in the playground, the children in the focus group described rules which focused on care of one another, both physically and emotionally. The principal explained the existence of unwritten rules in the playground, formulated by children and teachers in response to situations as they arise. This was supported by observations of older children intervening when a young child was throwing stones.

Changes in playground

The playground appeared to be in its original state and there were few obvious changes in this playground apart from the newly planted indigenous garden and the new fixed equipment in Area 6. The children were not observed playing on the equipment in the way it was designed for and said that they would like more fixed equipment such as swings and slides.
4.4 School 3

School 3: Outer suburban, new growth area

As previously mentioned, this school was established on its present site in 1996. It is a fringe suburban school and part of a rapidly growing corridor. Children either walk to school or are driven by their parents. Most children are driven. Children attending this school are drawn from both the immediate area and beyond. There is some diversity in cultural and ethnic background. Enrolments rose to 362 in 2000, 417 in 2001, 474 in 2002 and with approximately 575 in 2004. A number of new housing estates are being developed in the area so it is anticipated that enrolments will continue to grow. The current staffing numbers are 31.3 teachers, 3.2 integration aides. All staff are rostered on to do yard duty. The staff room in this school is very large and does not have comfortable seating. It is air conditioned so that the atmosphere was pleasant even in the hot weather but not many staff gather there. Many of them gather in groups in classrooms during breaktimes.

Characteristics of the school

The buildings are of modern design and the surrounds fairly barren and windswept. There is a large number of portables [temporary classrooms] which have been added to the landscape as enrolments increase. The school looks well cared for with several flower beds lining the path and school entrance. The playground is noisy as there are many children playing around the buildings. Trees which have been planted are still young and as yet not providing much shade or shelter.

1. Ways that current school policy impacts in the playground

Principal's views

The principal of School 3 explains that they have included social competencies in their school charter. This then governs the behaviors of the playground,
“instead of talking about rules we’ll actually be talking about values such as tolerance, respect, cooperation, caring, just some of our values…we’ll still have logical consequences for children who are behaving inappropriately.” She goes on to explain that this is not a government initiative but is something other Schools are doing, “A couple of Schools that we know are doing it and we liked it and so that’s why we took it on and weaved it into our school council.”

She describes the school timetable as consisting of six 55 minutes sessions, saying that it accommodates all specialist programs. She comments that a few other Schools are doing it also. The influence of other Schools can also be noticed in the comment about afternoon recess breaks, “we have a short afternoon with no recess most Schools aren’t that hung up about no recess now because you just want them to go out again and come back with no hassles…”

She also indicated that the school follows the sunsmart policy, with a “no hats no play rule.”

2. The rules of the playground and their enforcement

Principal’s views

The principal explains circumstances when children would be denied outdoor play opportunities. These include issues related to inappropriate playground behaviours, safety and bullying:

We have time out at lunch time for umm...consequences for children who behaved inappropriately in the playground, so they will be in for that. You might’ve noticed lunch time today we had groups of children inside, we’ve actually got one group one who’s a real problem and I- we’re actually starting to think that it might be a bit of a spatial problem because as soon as he gets out into wide spaces its like he goes crazy and he hurts kids…he’s got lots of issues, so he’s playing for the rest of the year inside and that’s working beautifully and he’s not been in any trouble at all so that really is working. Jenny has had a group of children, one group in and one group out, so we do lots of things like that. We’ve got another boy whose just really not happy at the
moment he, he gets bullied a lot and bullies...we've got a bullying policy here too, we've actually got bullying issues...it does go on despite all your best interests, very, very frustrating...so he's coming in when he wants to, to read...sometimes he sits in the office and reads...mostly he goes outside.

Children's voices

In this school seven children gained permission to participate in the focus group interview. There were four girls and three boys. The list of rules given by the children varied from those given by the principal in School 3.

Child 1. We're not allowed to eat around that area because it gets too messy and it goes onto the roads and into other houses. We're not allowed to chuck rubbish.

Child 2. We're not allowed to tie our jumpers on poles.

Child 3. No play fighting or anything because we'll get hurt and you could hit your head on the bars and all that. That's about it.

Child 5. Don't go down on the grass behind the park at the gate, near the little trees.

Child 4. No tackling. If someone comes up and tackles you too hard you umm can probably get really badly hurt on the oval because you got all cracks, and you could twist your ankle.

Child 6. No play fighting. Because other people can get hurt even if they're walking by. Because people can get really carried away and start to actually hurt people.

During the focus group interview the children explain that they have no say in the playground rules as the deputy Principal makes all the rules and when rules are broken there is a time out policy which means periods of no play, usually 15 minutes.

Child 7. When you get time out in the afternoon for half an hour, or fifteen minutes or half an hour, even if you drop papers or if you're caught dropping papers you get fifteen minutes time out in front of room 106.
3. Playspaces and equipment in the playground

Principal’s views

The principal of this school describes the playground and the changes she has initiated in response to play which has been observed in the playground,

We’ve taken a couple of risks you know, we’ve got a couple of piles of rocks and we’ve made sure they’re very stable umm, because there’s nothing adventurous. We found that the kids were bringing little cars and finding patches on the oval and making car tracks and they just loved it. So when we put the rocks down and every single day when we’d go out there there were children all over the rocks. And we knew it was potentially risky and we did have one accident where we did have a lot of volcanic rocks...so we’ve actually now cleared away all of the smaller rocks, have been removed...because children would collect them, build cubbies under trees with them...very creative and they loved it but everytime they’d try and bring in ones that were a little too large and we did have a child who had a cut finger and...he was ok...but I got a little bit worried thinking, oh well we’ve brought this sort of thing on...but if you don’t take a few risks the kids don’t get to do anything..!

You know, you look at the playground- we’ve had the odd broken arm and children have fallen off, but then that’s going to happen no matter what, there’s nothing that we’re particularly worried about in terms of children’s safety...

She also explains that her reasons for having segregated areas are based on safety of younger children.

... the first lot of playing equipment that’s closest to this end of the school is actually prep to two, and the other one is three to four...its not that the prep to two’s couldn’t use the three-four equipment its just to keep the bigger children a little bit away from the smaller children other than that, the children can play anywhere in the school they like.

The principal also explains that she has designated some areas for quiet play and plans to include more such areas in the future,
...round the portables we do say that that's a quiet area and that if you're playing there we want you to walk, but then they do run of course but then kids are kids...and we've also, I don't know if you've noticed but we've got some tables and chairs in the end of the quadrangle and we've set that up- and that's a quiet seated area. And you don't play ball games or anything like that around the portables so we have restricted that, and we want to create a five seated area over here amongst a tree on the left hand side, over the fence, that was a tree for a child that died so that's a quiet area, but I've noticed more of them are milling over that way a little bit so we think that could be another good quiet seated area with trees so we'll work on that for next year...

The principal explains that children are restricted from playing on those fences that border houses as they disturb residents by climbing on the fences.

I restrict them from playing there until the weather gets hot because they climb the fences and that's upsetting to the neighbours, its really unfortunate...kids are kids and even though I've got full staff on duty all the time its just really hard to monitor every part of the playground all the time.We've created a frog pond out here and we're actually, you know it's a lovely area where the children play and we've done it on purpose so that next year it'll be developed and turned into an indigenous plant area.

Children's voices

During the focus group interview the children describe their likes and dislikes in the playground. One child mentions the crowded fixed equipment and the others all agree.

I'd change it so that the playgrounds (the fixed equipment) get a bit bigger because they're overflowing with kids.

They also described the basketball courts as too crowded and explained that it is a safety issue.

I'd like to make the basketball courts have a little bit more basketball court because when it gets a bit too crowded because there’s only one basketball court and there’s a netball court and on the netball court, the cricket people play there. And umm, just on the basketball court there’s like about twenty-ten balls flying everywhere and
sometimes there’s – my friend, he got hit in the face about five times with the basketball.

One child suggested a solution could be to duplicate every piece of equipment in the playground and double the playground area

I’d double the playground I’d have two of everything.

4. The importance of outdoor play

Principal’s views

The Principal at this school describes outdoor play as immensely valuable in terms of social skill development, in particular as an opportunity to encourage resilience in children.

…developing their skills in being cooperative with each other, learning to problem solve, be patient, tolerant, all of the things that are part of the playing and being part of a team. Umm…and developing that resilience…play is an enormous part in developing some of that resilience… I think play contributes enormously to that.

Teacher’s views

Of the thirteen respondents, five said that outdoor play is extremely important, two said it is very important, two felt it was an opportunity to release surplus energy, four saw the outdoor environment as an important learning space and one described it as an important opportunity for imaginative play.

Children’s voices

During the focus group interview the children describe the play they like to engage in. This included games with rules, physical activity and imaginative play.
I like to play on the basketball court with a basketball. We play games like ‘knock out’ and ‘king’ with the basketball.

Yeah. I like to play on the monkey bars. Just swinging.

I like to play with my friends on the obstacle courses where we go around the whole playground and do stuff on the playground or we just like to play on these two poles that go down and we make up all sorts of tricks on them.

They’re like on this big platform next to the monkey bars.

I like to play on the slide. Some people climb up the slide and other people climb down and we slide down.

Basketball, because we have lots of fun and sometimes you have to slip over but it works out in the end.

I like to play cricket on the other basketball court because we use the pole as the stumps and there’s a little nob about as high as this table and it goes down and we just like to play cricket there because it’s really fun.

The children describe the range of play in the rocks area.

We just umm play like, tiggy.

I sometimes play this made up game that me and Sarah made up and sometimes I bring these two horses to school and we play on the rocks. Like big mountains and these little horses that stand in the middle and all that.

Follow the leader around the rocks.

One rock makes a really good hiding spot because you can hide in between the rocks and then there’s this big rock and there’s a rock that slopes down and you put a bit of sand on the rock that slopes and you jump off the big one and you slide down to the bottom.

The children also describe play in the sandpit, incorporating social issues.
We build castles and we some grade five and sixers they play fight in there. And people always wreck the castles. Its really bad though when they wreck it.

One of my friends- at least once a week I play with my little prep buddy in the sand pit we make a really big sand castle and we dig right down to the bottom of the sand pit and you just move all the sand out to the side so it looks really big.

Sometimes we, one time we went with our buddies to the umm, sand pit and we made the great wall of china and we made up this little house…and we called it the great wall of china.

I play in the sand pit with my friends and we feel so much better with each other.

I normally play in the sand pit with my friends and we make shapes and we make castles with it.

Figure 95 - Picture of the fixed equipment for the junior school, drawn by child from grade 2/3 focus group in School 3.
Figure 96 - Picture of cricket being play on the oval, drawn by child from grade 2/3 focus group in School 3.

Figure 97 - Picture of the basketball court, drawn by child from grade 2/3 focus group in School 3.
1. **Styles of supervision and the impact on play**

**Principal’s views**

The Principal at this school describes the role of the teacher on yard duty as a “monitor.” She stated:

*kids are kids and even though I've got full staff on duty all the time its just really hard to monitor every part of the playground all the time.*

**Teacher’s views**

Some teachers in this school saw their role as supervising in the playground as multidimensional. With 11 respondents, there were 22 descriptions of the role of teacher on yard duty. Five teachers saw their role as policing, eight as supervising, four as play leader, one as helper, one as friend/confident, one as player, one as first aider and one as problem solver.
Mapping of playspaces

Figure 99 - Landscape map of playground School 3.
Description of playspaces and result of observations of play

Area 1

Area 1 is on the eastern boundary of the school. It contains a shelter for bus travellers to sit in and is fenced with a low treated pine trellis. The surface of this space is concrete. This area is not out of bounds.

Figure 100 - Photograph of Area 1, School 3.

Figure 101 - Number of players and types of play in Area 1, School 3.
Imaginary

Four girls from Prep to grade 4 played an ongoing role play in the bus shelter. During their play they ran along the benches and jumped down. They were role playing and using high pitched voices. This lasted for three days and they were joined by another prep girl on the last day.

At the same time three boys from grade 1 and 2 played a role play within the fenced area but not in the shelter.

Scientific/sensory

Two boys and one girl from grade prep experimented with paper planes in this area on one day.

![Graph showing gender and grade level of players in Area 1, School 3.]

Figure 102 - Gender of players in Area 1, School 3.

Summary of play in Area 1

For six days of observations, no children played in this space.

Both boys and girls played in this area ranging in age from grade prep to grade 4. The bus shelter facilitated imaginary play with the players often going underneath the seats and also walking and running along them and jumping from them. Even though this playground is crowded there were six days when no children played in this area. No teacher intervention was observed. No explanation could be found.
Area 2

Area 2 is between area 1 and the school building. It is designated for use by grades 3 to 6 and is out of bounds to children from other grades. The fixed equipment is underlayed with woodchips and there is no shade. A sandpit is provided for this area.

Figure 103 - Photograph of Area 2, School 3.

Type of Play

Figure 104 - Number of players and types of play in Area 2, School 3.
Structured

Some of the children on the equipment played a chasey game around the structure.

Rough and Tumble

On one occasion a group of six boys from grade 5 and 6 engaged in rough and tumble play under the monkey bars.

Imaginary

On two days, ten grade 3 and 4 girls and boys were engaged in a role play on the equipment. These children moved around the equipment making unusual sounds and speaking in a variety of different voices. It was not a game of chasey but involved children engaging with others in dialogue.

Scientific/sensory

Three girls from grade 2 collected insects from around the borders of the sandpit.
On each day of observations a large number of boys and girls from grades 3 to 6, approximately 40, climbed on this fixed equipment. It was not clear whether their play was Imaginary or Structured. In this isolated case, the researcher decided not to label it due to insufficient information. On one particularly hot day, the children were still on the equipment however, they remained still and spent the break talking together.

**Summary of play in Area 2**

Children engaged in a wide range of types of play in this area. Children used this equipment in many ways. During the period of observation no children played in this sandpit. No teacher intervention was observed.
Area 3

Area 3 is designated for grades prep to 2 and contains a piece of fixed equipment of smaller dimensions. This area has no shade.

Figure 106 - Photograph of Area 3, School 3.

Figure 107 - Number of players and types of play in Area 3, School 3.
**Structured**

On two occasions children were playing a chasey game on the equipment.

**Imaginary**

On eight occasions children were observed engaged in role play on the equipment.

![Figure 108 - Gender of players in Area 3, School 3.](image)

**Summary of play in Area 3**

On each day of observations there were 30 or more boys and girls playing on the fixed equipment.

This equipment was always very crowded. Both boys and girls played here. Many of the children moved around the equipment, socializing with others as they went. Amongst all the activity a role play was maintained by eight of the children over several days. No teacher intervention was observed.
Area 4

Area 4 is fenced off from the fixed equipment areas so there is no flow of children running through the space. There is a sandpit and a pile of rocks. Also a few small trees have been planted in the area.

Figure 109 - Photograph of Area 4, School 3.

Figure 110 - Photograph of rock pile in Area 4, School 3.
Only large rocks, too heavy for children to move, remain in the rock pile. The Principal explains during the interview that the children were throwing the smaller stones and rocks and that one child had been injured. There is space between the rocks which children can access. The surface of the rocks has been worn smooth in many places due to children climbing on them.

Figure 111 - Photograph of sand carried to rocks in Area 4, School 3.

Shade from a small tree falls on part of the rocks for a short while during the day. There is sand around the rocks on one side which children have carried there from the nearby sand pit.
In among the rocks are twigs and leaves, gathered by children and used in play.

*Figure 112* - Photograph of rocks close up in Area 4, School 3.

*Figure 113* - Number of players and types of play in Area 4, School 3.
Imaginary

On two consecutive days a group of eight girls from grades prep to 2 played in among the rocks with leaves as props.

On one day twelve girls and boys from prep to grade 3 played on the rocks in a role play game.

Three boys from grade 3 and 4 played in the sand with small toys.

Ten boys and girls from grade 3 and 4 played in role play on and among the rocks for three days.

On one day eight boys from prep to grade 2 played with toy trucks in the sand.

Scientific/sensory

On three days seven boys from grade 3 and 4 played in the sandpit digging and building with sand.

A group of four girls from grade 3 and 4 dug and built in the sand.

A group of four boys from grade 2 and 3 played with “spitfire” insects in the tree near the sandpit.

On one occasion three boys from grade 2 and 3 were digging in the dirt under the tree near the rocks.
Summary of play in Area 4

Many children played in this area, both boys and girls. Children also played in mixed age groups here. On the one occasion that there was intervention by a teacher, play resumed when she was out of sight. The environment facilitated exploration by the children of their natural world. The rocks were worn smooth in many places as was the surrounding dirt. This indicated how popular they were as a place to play.

On one hot day a group of five grade 2 and 3 girls and boys sat chatting on the rocks.

On one day the teacher on supervision spoke to a child in the sandpit,

Teacher, “S. were you throwing sand?”

Child, “It’s a game.”

Teacher, “No, no throwing sand.”

On one day two girls and three boys from grade 5 and 6 stood on the rocks talking together.
Area 5

Area 5 is located between the oval and the school buildings consists of a large shelter with a concrete floor and bench seating along two sides. All grade levels are permitted to use this area.

Figure 115 - Photograph of Area 5, School 3.

![Photograph of Area 5, School 3.](image)

Figure 116 - Number of players and types of play in Area 5, School 3.
Structured

Seven girls from grade 3 and 4 played a ball game in the shelter.

Four boys from grade 3 and 4 played a ball game with a basketball over two days. This involved children standing on the benches and bouncing the ball to each other.

Popular

Four boys from grade 2 and 3 played a ball game in the shelter which involved role play. One boy called out, “Imagine this is the world match.” This play coincided with the televising of world cup rugby.

Scientific/sensory

Three boys from grade 2 caught insects in the shelter with bug catchers.

![Figure 117 - Gender of players in Area 5, School 3.](image)

Summary of play in Area 5

This area was shaded and children played structured games here in the hot weather. On one occasion they incorporated a popular sporting event and role played the well known players. No teacher intervention was observed.

A group of eight boys from grade 5 and 6 sat talking in the shelter on one of the hot days. On two observation days, no children played in the shelter.
Area 6

Area 6 is the area on the south west corner of the school grounds. It is between the oval and the high wooden school boundary fence. It has been planted with a variety of native trees which are still immature. There are cricket nets at the southern end of this area. Children are not allowed to climb on the wooden fence which borders a residential area.

Figure 118 - Photograph of Area 6, School 3.

Figure 119 - Number of players and types of play in Area 6, School 3.
Structured

On three days a group of 10 grade 3 and 4 boys practised cricket in the nets. On another day, five more boys joined in.

On two days seven grade 5 and 6 boys practised cricket in the nets.

![Figure 120 - Gender of players in Area 6, School 3.](image)

**Figure 120** - Gender of players in Area 6, School 3.

**Summary of play in Area 6**

The boys playing in this area used the equipment for the purpose it was designed for. No girls were observed playing here. No teachers were observed anywhere near this area. On two days, no children played in this space.
Area 7

Area 7 is known as the oval. It is a large grassed area on the southern boundary of the school grounds. Young trees have been planted around the boundary but are too small to give significant shade as yet. The surface, although grassed, is very hard and large cracks appear frequently all over the area. Soccer goals are at either end of the oval.

Figure 121 - Photograph of Area 7, School 3.

Figure 122 - Number of players and types of play in Area 7, School 3.
Structured

Thirteen boys from grade 3 and 4 played soccer on the oval on three days. On one of these days, two more boys joined in. On another day only three boys played.

Seven boys from grade 2 and 3 played cricket in the middle of the oval on two days. The soccer went on around them.

Scientific/sensory

Four boys from grade 3 and 4 dug a hole and attempted to stand a football goal post in it. This went on over two days

![Graph showing number of players by grade level]

Figure 123 - Gender of players in Area 7, School 3.

Summary of play in Area 7

During the observation period this area was used for structured games with rules, with the exception of the boys experimenting with erecting a goal post. Only boys were observed playing here and no teacher intervention was seen.
Area 8

Area 8 is in the south-west corner of the school grounds and is planted with young native trees. A residential area is on one side and the oval on the other.

Figure 124 - Photograph of Area 8, School 3.

Figure 125 - Number of players and types of play in Area 8, School 3.
**Imaginary**

Ten girls and boys from grade 2 and 3 role played running among the trees.

**Scientific/sensory**

Thirteen grade 2 and 3 children explored among the foliage of the trees carrying bug catchers and containers on three days. On four other days, seven grade 3-6 boys and girls explored among the foliage carrying containers. On two days, fifteen boys and girls from grade 3 and 4 explored the area carrying containers and bug catchers.

![Figure 126 - Gender of players in Area 8, School 3.](image)

**Summary of play in Area 8**

Children explored their natural environment in this area. Both boys and girls played here and on one occasion used the setting for a role play. No teacher intervention was observed here.
Area 9

Area 9 is a large asphalt area in the centre of the school. It is painted with basketball courts.

**Figure 127** - Photograph of Area 9, School 3.

**Figure 128** - Number of players and types of play in Area 9, School 3.
Structured

Between eighteen and twenty-five boys played basketball every day. On one day forty boys were playing basketball here. During one observation day when the weather was extremely hot only three boys played basketball here. On three occasions, three games of basketball were being played simultaneously. Only one of these games used the full court, the other two games adapted to the space they had.

![Figure 129 - Gender of players in Area 9, School 3.](image)

**Summary of play in Area 9**

This space was used by boys only during the observation period for playing basketball. The use of this space did not change during the observation period. It was usually very crowded but no disputes were observed. No teacher intervention was observed either.
Area 10

This area is adjacent to area 9 and is also asphalt surface. There is a large structure resembling a pergola. There is also an area shaded by a shadecloth sail.

**Figure 130 - Photograph of Area 10, School 3.**

**Figure 131 - Photograph of shade in Area 10, School 3.**
**Structured**

Small groups of children played ball games. All age groups and both boys and girls.

**Chants and Rhymes**

Small groups of children both boys and girls were observed skipping and singing rhymes. As this is a very crowded and noisy area, it was not possible to hear their voices clearly.

*Figure 132 - Number of players and types of play in Area 10, School 3.*
Figure 133 - Gender of players in Area 10, School 3.

Summary of play in Area 10

Many small groups of children were observed walking around or sitting in this space quietly talking. All age groups were present. Approximately one hundred children gathered in this area. There was always a supervising teacher in this area.
Area 11

Area 11 is a covered walkway between two rows of portables. At the southern end is a small grassed area with fixed tables and chairs. Children are permitted to sit in the doorways at recess breaks. This area provides shade in the hot weather.

*Figure 134 - Photograph of walkway in Area 11, School 3.*

*Figure 135 - Photograph of tables in Area 11, School 3.*
Structured
Many small groups of children played board games such as Junior Scrabble and card games in the doorways of the classrooms.

Imaginative
Many small groups of children from grades Prep to 2 engaged in imaginative play with small props in the garden beds between the classroom doorways. This play often involved small toys.

Popular
Many of the props used by children in their play were figures from popular television programs or movies.
Summary of play in Area 11

In every doorway during the observation period, small groups of children sat and talked or played boardgames. This area was shaded and provided respite from the heat of the days. On cooler days the children also ran through this area. Both boys and girls played in this area. There was always a supervising teacher in this area.
Area 12

Area 12 is a small triangular area with some shade. It is fenced off from the surrounding areas. The surface is concrete and some benches are around the fence.

Figure 138 - Photograph of Area 12, School 3.

Figure 139 - Number of players and types of play in Area 12, School 3.
Structured

Ten boys from grades Prep to 2 play chasey in the area.

Imaginary

On one occasion five children from grades Prep to 2 role play. Another day two Prep boys play with stick people in the dirt. Four girls from grades 3 and 4 play a “horse” game.

Scientific/Sensory

Two boys from grades 3 and 4 scratch with bark on the cement.

Rough and Tumble

Three grades 5 and 6 boys engage in rough and tumble play during one observation. Another day five boys from grades 3 to 5 also engage in rough and tumble play.

Three boys from grades 2 and 3 engage in rough and tumble play during one observation.
**Summary of play in Area 12**

This area is not a quiet area and supports rough and tumble play more than any other space in the school even though the surface is concrete. The way children use this area changed from observation to observation. It was often used for imaginary play where children from younger grades quietly played together but they also used it for a boisterous game of chasey. Teachers closely supervised this area but only one example of intervention was observed when a teacher asked children not to climb on the fence in case they broke it.
4.4.1 Summary of School 3 results

Types of play
In this playground children engaged in a range of types of play. In seven of the areas children played structured games with rules. In seven areas they also played imaginatively. Equally common was scientific/sensory play which was also observed in seven areas. In two areas popular play was observed and in two areas, rough and tumble play was seen. Chants and rhymes were observed in one playspace in conjunction with skipping. In this playground, no examples of illicit play were observed.

Gender of players
In this playground very few examples of boys and girls playing together were observed except for during imaginative play in the lower grades. Both boys and girls played on the same fixed equipment but were not observed to be playing together.

Grade Level of players
Most areas of this playground are available to all age groups with the exception of the fixed equipment which is designated to grade levels.

Numbers of children playing
Large numbers of children play in this playground. Many of the playspaces are quite crowded. The largest playspace, Area 7 is used by a relatively small number of children.

Allocation of space
The principal explains that her reasons for having segregated areas are based on the safety of younger children.
One child mentions the crowded fixed equipment and the others all agree. They also described the basketball courts as too crowded and explained that it is a safety issue. One child suggested a solution could be to duplicate every piece of equipment in the playground and double the playground area.
**Playground supervision**

The principal of this school sees the role of supervising teachers in the playground as one of monitoring. She says, “and even though I’ve got full staff on duty all the time its just really hard to monitor every part of the playground all the time.”

**The importance of outdoor play**

The principal at this school describes outdoor play as immensely valuable in terms of social skill development, in particular as an opportunity to encourage resilience in children. There were a range of responses about the importance of outdoor play from this school staff. They ranged from extremely important, to release surplus energy, an important learning space and one described it as an important opportunity for imaginative play.

**Children’s voices**

During the focus group interview the children describe the play they like to engage in. This included games with rules, physical activity and imaginative play. Their drawings include a range of play types (see figures 95-98).

**Playground rules**

The principal of School 3 explains that they have included social competencies in their school charter and that this then governs the behaviours of the playground. She says that there are no set rules. During the focus group interview the children list many very specific playground rules. They explain that they have no say in the playground rules as the deputy Principal makes all the rules and when rules are broken there is a time out policy which means periods of no play, usually 15 minutes.

**Changes in playground**

This is a school with a rapidly expanding enrolment and the principal is attempting to provide a playground which meets the needs of the children. When funds permit, new fixed equipment is purchased and areas of shade cloth are added. The principal plans to resurface the oval when the school can afford it.
4.5 Comparison of results across all schools.

Ways that current school policy impacts on the playground

The principals of both Schools 1 and 3 describe the recently formalized values of the school and the school charter as the driving force behind rules both within classrooms and on the playground. None of the schools has a special set of playground rules. School 2 however, with a very small, crowded, asphalt playground has a program which addresses playground behaviours, a “stop-think and do” guideline designed to combat violence at recess and lunch breaks.

Timetabling in Schools 2 and 3 is influenced by the need to accommodate specialist classes whereas in School 1, the structure of the timetable is traditional and staff have resisted attempts by the Principal to change.

The rules of the playground and their enforcement

Despite saying that specific playground rules are no longer needed, the principal of School 1 makes an extensive list of playground rules. There was a different focus in School 2 where the principal explained the existence of unwritten rules in the playground, which supervising teachers formulate in response to situations which arise. The children in School 2 however, described a long list of detailed rules of the playground. In School 3 the principal says that certain behaviours are unacceptable in some parts of the playground, for example, quiet areas where there is no running. As in School 1, this varied from the children’s very detailed list of playground rules.

In each of the schools children who broke rules in the playground were usually denied play. In Schools 1 and 3 children behaving inappropriately in the playground are given time out or are sent inside. This contrasted in School 2 where rule breakers are given time out or are denied play by having to walk around with the supervising teacher.

In School 1 the principal believes that safety concerns have not driven changes in the playground. However, during the focus group interview, the children explained the need for each rule as a safety issue. The children in School 1 did, however, feel
empowered in the decision making process. This also applied to improvements to the playground with the children initiating the development of a shelter shed for their use and they had raised money to furnish it.

By contrast the children in Schools 2 and 3 said they had no say in the formation of rules in the playground.

**Number of Staff Involved in the Formation of Playground Rules**

As can be seen in Table 1, few staff in any of the schools felt involved in the formation of playground rules. A small number of staff in each of the schools was involved in the modification of playspaces for particular games. In School 2 seven staff members created incidental rules while supervising and in School 3 it was five. In School 2, two staff created incidental rules during supervision.
Table 1 - Number of staff involved in the formation of playground rules

<table>
<thead>
<tr>
<th>Number of staff</th>
<th>School 1 (n=6)</th>
<th>School 2 (n=11)</th>
<th>School 3 (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved in modification of playspaces for particular games</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Involved in staff discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To change playground rules.</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Incidental rules as they come up/specific rules for particular children</td>
<td>2</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

Children’s drawings from focus groups of grade 2 and 3 children in each school

In each of the schools, children’s drawings reinforced their comments during the focus group interviews. In School 2, the drawings were particularly useful as not all of the children spoke during the interview. Therefore the drawings were essential to know what these particular children enjoyed playing in the playground. In School 1 the children drew about imaginary play. They mostly drew themselves playing alone, except for one child who included one other player. Their play was enhanced by props and by fixed structures such as the treated pine “horse” and a large rock. The children spoke about one teacher who participated in their imaginary play, saying she was their favourite teacher. In School 2 the children all drew a downball court
suggesting that for this group of children, asphalt was not a concern but a necessity. Their favourite current play choice was for games with rules, however they discussed a wide range of other play activities they engage in also. In School 3, two of the children drew themselves playing alone on the fixed equipment and on the basketball court. The other two children drew themselves as part of a team. All pictures showed that children valued the provided equipment and enjoyed using it.

The drawings from the three focus groups supported the content of their interview responses and in a broad way, illustrated the range of play in each playground. The drawings from Schools 1 and 3 showed a range of play whereas in School 2, where choices were limited due to space constraints, only one type of play was shown.

**Interview responses**

During the focus group interviews the children from School 1 described the type of play they most enjoyed and for each child this was quite different, including running in large open spaces to playing in the sandpit. The children from Schools 2 and 3 however, mainly discussed their need for more equipment and in both these schools, crowded playspaces was also an issue.

**Playspaces and equipment in the playground**

The principal of School 1 explains that most of the old treated pine play equipment has been replaced with new modular structures and that all tyres have been removed. He describes all play equipment as up to date now. By contrast in School 2 little attention is given to fixed equipment by the principal who instead focuses more on loose equipment in the playground to motivate children to play. Another approach is taken in School 3 where the principal says that observation of play in the playground has been a motivating force behind decisions to include fixed pieces such as the rocks, however safety is also noted as a major issue in this school.

In School 1 the children say they preferred the old treated pine play equipment more than the new modular constructions. However in Schools 2 and 3, the children wanted more fixed equipment. In both Schools 2 and 3 children wished for more space to play whereas this was not a concern mentioned by children in School 1.
Types of play

In each of the school playgrounds in this study, a range of types of play were observed.

Structured

This was one of the most common types of play observed in the three playgrounds. It was well catered for, receiving large allocations of space in the playgrounds. More boys than girls played games with rules. Structured play was mostly played by children from grades 3 to 6. The exception to this was School 2 where both genders played together and younger children participated.

Imaginative

In School 2 there were only three areas where imaginative play was observed whereas in schools 1 and 3 it was as common as structured play.

Scientific/sensory

This type of play was common in all three school playgrounds and was participated in by both boys and girls, particularly grades 4 and younger.

Popular

This type of play was not observed in school 1 and only twice in each of the other schools.

Rough and Tumble

In Schools 1 and 2 this type of play was seen in four areas, not always with grassed surfaces, sometimes on asphalt or concrete. In School 3 it was observed in 3 areas. It always involved boys.
Illicit

In school 1 children were playing illicitly in four areas. In School 2 in two areas and in School 3 no illicit play was observed.

The importance of outdoor play

The principals of all the schools in this study describe the learning of social skills as a very important aspect of the playground. They also agree that the physical exercise children get during many play activities is beneficial. In each of the three schools the principals said they believed that outdoor play is very important. As can be seen in Table 2 the teachers place less importance on outdoor play. In each school, teachers acknowledge its value for learning social skills. There were more positive responses from teachers in School 3 than either of the other schools.
### Table 2 - Teacher ratings of the importance of outdoor play across schools

<table>
<thead>
<tr>
<th>Importance of outdoor play</th>
<th>School 1 (n=6)</th>
<th>School 2 (n=11)</th>
<th>School 3 (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely important for social development</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Very important health benefits</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Important for balanced development of child</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Surplus energy</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Important aspect of learning</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Imaginative play opportunity</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

### Styles of supervision and the impact on play

In School 1 the principal had increased the number of teachers on playground supervision and was providing one adult for each integrated student. In School 3 the principal has rostered as many teachers as possible for supervision so that all areas can be monitored. In School 2 where teachers do not see their role as playing with children, the principal employs additional staff for the purpose of encouraging play and teaching games. The children from each of the schools speak fondly of teachers
who play with them in the playground, either joining in games with rules or participating in role plays.

As can be seen in table 3 teachers in each of the schools see their role as supervisor and policing rules. In school 3 there are four teachers who see part of their supervising role as play leader. Some teachers listed a combination of several roles when supervising.

**Table 3 - Teachers’ views on their playground supervision styles**

<table>
<thead>
<tr>
<th>Supervision style</th>
<th>School 1 (n=6)</th>
<th>School 2 (n=11)</th>
<th>School 3 (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policing</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Supervisor</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Play leader</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Role model</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mediator</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Helper</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Friend / confident</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Player</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>First aider</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Problem solver</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Welfare officer</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Time Spent by teachers in Supervision of Playground Per Week**

As can be seen in table 4, teachers at each of the schools spend varying amounts of time on playground supervision. In School 1 all teachers spend the same large blocks of supervision time each week. In School 2 all teachers spend the same shorter 15
minute blocks and in School 3 there is variation between portions of allotted supervision times for teachers.

**Table 4 - Time spent by teachers in supervision of playground per week**

<table>
<thead>
<tr>
<th>Time</th>
<th>School 1 (n=6)</th>
<th>School 2 (n=11)</th>
<th>School 3 (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 x 50 minutes per week</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 x 15 minutes</td>
<td>0</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Back up</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Organizing lunch time activities</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3 x 15 minutes</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2 x 15 minutes</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>4 x 15 minutes</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

**Teachers’ views on positive aspects of yard duty**

In table 5 we see that teachers in schools 1 and 2 named very few positive aspects of yard duty. Many teachers in school 3 however saw a number of positives when on yard duty.
**Table 5 - Teachers’ views on positive aspects of yard duty**

<table>
<thead>
<tr>
<th>Positive aspects</th>
<th>School 1 (n=6)</th>
<th>School 2 (n=11)</th>
<th>School 3 (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting other children</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Seeing children in a different context</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Short sessions (15 minutes)</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Seeing children from previous classes</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Observing children playing</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Teachers’ views on negative aspects of yard duty**

In Table 6 it can be seen that most of the teachers in school 1 find yard duty stressful. In the other two schools this is not the case. Unpleasant weather conditions are a factor for many teachers in each of the schools. Teachers in all three schools express annoyance at the constant requests for help which they feel are unnecessary, especially in School 3. Another shared concern of teachers in each of the schools is litter. In Schools 2 and 3 fights are mentioned as a problem to supervising teachers but not in School 1. Teachers in School 2 describe the playground as dangerous and that the likelihood of being hit by balls is high. This is not a concern of teachers in either of the other two schools. A common issue across all schools is that time spent on yard duty could be used for preparation of classes.
### Table 6 - Teachers’ views on negative aspects of yard duty

<table>
<thead>
<tr>
<th>Negative aspects</th>
<th>School 1 n=6</th>
<th>School 2 n=11</th>
<th>School 3 n=13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpleasant weather conditions</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Annoyance at constant requests for help which are unnecessary</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Litter problems</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Stressful</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Fights</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>So much of it/always policing</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Takes away from lesson preparation time</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Dangerous/balls kicked into teacher</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Time out of break</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Reasons why children would miss outdoor recess breaks**

Each of the school principals described extreme weather conditions as a reason why children would remain inside the school building during recess breaks. In school 1
children were able to request to remain indoors if they preferred to listen to music or use the computers. In school 2 children did not have this option and only stayed indoors as a discipline procedure. This was also the case in School 3 where children exhibiting undesirable behaviours in the playground would be kept indoors.

In each of the three schools there is a time out area outdoors where children can be sent for short periods as a discipline measure when they break playground rules.

The results show that there are commonalities and differences between the three schools in this study. Prior to commencing data collections, the differences of location, age of school, size of playground and the historical context of each school were obvious. As the data was collected and analyzed, other differences emerged in the areas playspace design, equipment and teacher supervision styles. However, the commonalities between each of the three schools were greater than the differences and in each school a wide range of play categories were observed. In each school children were using the playspaces and equipment in innovative ways and in each school, teachers were struggling with their role in the playground.
CHAPTER 5: DISCUSSION

5.1 Introduction and discussion in relation to the aims of the study

This study was prompted by the researcher's desire to better understand the types of play children were engaging in, in the playgrounds of three Melbourne primary schools, built during different periods, in different locations and in different socio-economic contexts. By developing a schedule of play categories in a pilot study, comparisons could be made of the three playgrounds in order to understand whether children in each school had the same play opportunities. The researcher wanted to identify what was impacting on children's play choices in each of the three playgrounds by understanding the various influences on playground policy in each school.

This research has grown from a concern that Australian primary school playgrounds may be following the path of many other first world countries, becoming less and less child friendly and increasingly restricting children's play opportunities as described by Armitage (2001), Evans (2003), Neto (2005), and many others. This study has sought a 'rich' picture of three primary school playgrounds and by selecting this diverse sample, the possibility of making comparisons and finding commonalities was increased.

This study was designed to view the playground from the perspectives of the principal, teachers and children and for the researcher to then observe each playground to see what types of play children were engaging in, how they were using playspaces and equipment, how teachers were supervising the playground and how they were interacting with the children during playground supervision.

Playground rules were also a focus of this study and comparisons were made of the views of principals, teachers and children about the creation of playground rules and the enforcement of them. Playground observations revealed that there were different perspectives regarding playground rules and their enforcement which impacted on the supervision styles of some teachers and the play choices of some children.
At the heart of this study was the researcher’s belief that the right to play in the primary school playground is a fundamental right of all children attending a primary school, as well as a vital opportunity for learning life skills. The researcher believed that a better understanding of factors influencing children’s play opportunities needed to be gained in order to protect these rights. Australian research by Evans has indicated strongly that Australian primary school playgrounds may not be places where children’s play is promoted; he has described a lack of equipment and rigid rules as detrimental to the play opportunities of children (Evans, 2001). The ‘rich’ picture obtained of the three schools in this study supports Evans’ conclusions.

The main focus of research into education in Australia has been on the learning which occurs in the classroom, not the learning which occurs in the playground and this is readily observed at the Federal Government education website, under the research link (http://www.dest.gov.au/sectors/research). Not surprisingly, this study showed that at the grass roots level in the schools investigated, both principals and teachers were focusing on the classroom learning of students and neglecting the learning happening in the playground. Recess breaks were scheduled around timetabling issues in classrooms, not around the need of the children for a recess break outdoors, where equally valid learning opportunities exist.

In the three schools in this study teachers did not value the playground as an equally important learning environment as the classroom. This became evident in the early stages of data collection when it was difficult to find teachers who were willing to participate in this study of the playground by filling out the questionnaire. Some teachers who took a questionnaire to complete, did not return them despite follow up requests. Their focus appeared to be on the curriculum and classroom demands.

During interviews with principals and in the questionnaire responses of teachers, the playground was described as a place of learning by only one teacher, although it was acknowledged by a few adults that students gain social skills whilst playing during recess breaks. The possibilities of learning through outdoor play were simply not understood by teachers. It has been suggested by Evans (2003) that it is the undervaluing of the play of children by adults that is leading to a decrease in play opportunities in school playgrounds today in Australia. As previously discussed, this sentiment has been echoed in other parts of the world, particularly in the USA (Clements, 2005).
The results of this study strongly indicate that, whilst opportunities for the play of children are being limited by adults, children adapt, as predicted by Hart (1992), and make the best of what is available to them. By doing this, children in each of the playgrounds in this study managed to make opportunities for engagement in many types of play. In each of the playgrounds in this study the types of play children were engaging in were mostly the same. According to the categories designed for this study, Chants and Rhymes was the only category missing from the playgrounds in schools 1 and 2. Interestingly, play often occurred in an illicit way, involving considerable risk of being caught breaking playground rules. Children persisted nevertheless driven, it would seem, by an intrinsic motivation to play and learn. Educating adults about this vital aspect of children’s learning for life proves to be extremely difficult, as demonstrated by the level of understanding by the adult members of the teaching profession, interviewed in this study.

Another motivation for undertaking this study was that the researcher believed that playground memories stay with us and the lessons we learn in the primary school playground as children are indeed remembered. She therefore sought to understand whether the school playgrounds in this study were places of imaginings and laughter as described in the ballad by Cat Stevens or restrictive, barren environments, suggested by Evans (2001). Interestingly, each of the school playgrounds in this study could be described as restrictive, with rigid rules that were not conducive to encouraging rich play opportunities, and from an adult’s perspective, the playgrounds in Schools 2 and 3 would be described as barren.

In each school rigid rules were in place and they focused on restricting running, keeping away from bushy areas, playing with sticks, playing on the equipment designed for another age group, and playing in areas designated for other grade levels. In this study fixed equipment was generic, of similar appearance in each playground, and very few pieces of loose equipment were available for children to enhance their play. Teachers on yard duty mostly saw themselves in a policing role and rarely engaged in play with the children. Surprisingly, despite all of these negative factors, children engaged in a wide range of play and each of the playgrounds echoed with children’s laughter. In the smallest, most crowded playground, in School 2, the children’s laughter was loudest, the happiness tangible.
Using the theoretical perspective of Interpretivism, a relativist ontology, as described by Green (2002) was assumed and the ‘truth’ of what was occurring in each of the school playgrounds was viewed as multiple, with the perspectives of the principals, interested teachers and focus groups of children equally valued. By analysing the multiple realities that participants have constructed regarding their playgrounds, the researcher has attempted to make sense of the factors impacting on the children’s play in each of the playgrounds. By making observations of the playground, the researcher has looked for the meaning and purpose behind playground policy in each school, based on the behaviours observed.

Many comparisons between the three playgrounds were possible in this study regarding the influence on children’s play choices. Aspects such as the physical features of the playspaces, the age group of players and their gender and teacher supervision styles were investigated.

This research also tried to understand how playground rules were made and enforced by each of the three schools. In this rule making process the role of principals, teachers and children is explored, and this varied across the three schools. The findings show the complexities in the interrelationships of the people within the schools as they relate to the playground.

The data collection methods chosen for this study importantly attempted to identify the various perceptions of the changes occurring in each of the school playgrounds. This study sought to learn about the complexities within each school as it related to the playground and was therefore ideally suited to a qualitative approach. As previously stated, this research examined how the influences on the three school playgrounds varied and also examined their commonalities.

5.2 Types of play children are engaging in at recess breaks in the playground.

Previous research has shown that children engage in a range of types of play in the primary school playground (Opie and Opie, 1959; Frost, 1979; Russell, 1994;
Pellegrini, 1995; Lambert, 1999; Armitage, 2001; Brown, et al. 2001; Malone, & Tranter, 2003). In this study, play categories were developed during the pilot study stage so that play could be categorized during playground observations. The play categories were designed to incorporate all observed play.

In each of the playgrounds in this study, children were engaging in most categories of play. It was fascinating to find that although each of the schools was in a different socio-economic context, with playgrounds which looked different, the range of play activities in each was very similar. In each of the schools the two most popular types of play were Imaginative and Games with Rules. The next most common type of play observed was Scientific/sensory. Interestingly, Chants and Rhymes and popular play were rarely observed in any of the school playgrounds in this study. This was surprising as the research by Opie and Opie (1959, 1980) suggested that Chants and Rhymes are indeed commonplace in school playgrounds.

5.2.1 Games with rules

This category of play has been consistently described in research about primary school aged children (Roberts, Arth and Bush 1950, Piaget 1962, Eifermann 1971, Hughes 1999, Jambor 2004, Flemmen 2005). It was a very visible type of play in school playgrounds in this study with large areas of the playground commonly allocated for it. This type of play was highly valued by teachers and principals in this study. This was not surprising because adults in general promote and support this type of play for the children in their communities. Australia’s reputation as a sporting nation was established even before Federation in 1901 when the nation was competing internationally and despite its relatively small population, Australia has produced world champions in most sports (http://www.dfat.gov.au). Sport has always linked Australians and this is very evident in the popularity of junior sport competitions such as football, netball, basketball, golf, hockey, swimming, tennis, volleyball and wrestling, all actively promoted by the Australian Sports Commission (http://www.ausport.gov.au/junior). It is quite understandable that this cultural attitude to junior sport is reflected in primary school playgrounds in Australia and explains why adults value and promote this type of play.
In the schools in this study, formal Games with Rules were highly valued by principals when allocating space and providing funding for equipment. This supports the findings of Thorne (1993) and Malone and Tranter (2003) who noted that large areas of the playgrounds in their studies were mostly devoted to areas designed for formal Games with Rules to be played by boys. The data in this study shows that in Schools 1 and 3, large areas of the playgrounds were designated for this type of play by boys; no girls were observed playing on the large grassed ovals in either school, during the observation period. These areas were dominated by boys playing cricket, football, soccer or other formal Games with Rules.

By contrast, in School 2, it was very interesting and rather surprising that boys and girls played together in all playspaces. In this school, Games with Rules were described as valuable and important by the teachers and principal. The importance of this type of play was so high in School 2 that ancillary staff were employed at recess times to teach children Games with Rules and considerable funds were allocated to the purchase of equipment for such games. Because of the small number of students and the small playground area, boys and girls from all age groups played together. This is significant in that schools 1 and 2 segregated children by age level and gender in the playground and, given a choice, many children may well have chosen to play with other age groups and in mixed gender groups. The rules of the playground in schools 1 and 3 did not allow for this possibility.

Pellegrini and Blatchford (2000) propose that play should be considered on a continuum of more or less play. It was beyond the scope of this study to investigate this theory but on the surface it was indeed evident that this proposition is true. Interestingly, there were many examples of children engaged in formal Games with Rules such as cricket and in Schools 1 and 3, these games included participants who were more or less interested in the games. That is to say that some players were needed to make up team numbers and showed less enthusiasm for the games than others. These less interested players created other play on the sidelines of the formal game as they waited their turn to bat. The presence of an intrinsic desire to play was reinforced as children were observed resourcefully creating play scenarios while waiting for their turn in the formal game.

Other less formal Games with Rules as described by Flemmen (2005) where children negotiated their own rules and chose players and playspaces themselves appeared in this study. These games looked like imitations of the formal games such as basketball
and often involved the same loose equipment such as basketballs and cricket bats. As communication in these games is of a horizontal nature rather than a vertically adult imposed nature, children’s learning and practice of negotiating skills is enhanced during such play (Flemmen, 2005). This type of play was observed in each of the schools many times, often around the edge of the playspaces designed for the formal games. Without prolonged and extended observation it is not possible to conclude whether the less formal Games with Rules play was an adaptation due to lack of space or whether the children would have played such games regardless of the available space. This would be a very interesting study. The very nature of this play requires that participants are actively engaged. These games are less rigid as there is constant renegotiation of rules and teams throughout the game (Flemmen, 2005). As previously discussed, these less formal Games with Rules provide opportunities for the learning and practice of social skills in a more open-ended way than the more formal games. As Flemmen (2005) described, this play is the basic tool for democracy because it requires negotiation, compromise and fairness to all players. Without these factors, the play will not continue.

Eifermann’s findings that participation in rule governed competitive games increased in popularity to a peak in fourth grade, then after that, participation in these activities dropped steeply towards adolescence and beyond with children preferring non rule orientated activities (1971) is not really supported by the findings of this study. In each of the three schools, structured Games with Rules were evident at all grade levels however, they were most popular with boys from grades 3 to 6. This is not surprising, considering the allocation of space for this type of play for upper primary boys was such a generous proportion of the playground. Piaget theorized that during the concrete operational stage, children were cognitively able to play Games with Rules. This is not supported by this study either as children from grades prep to six were all observed engaging in Games with Rules. The difference with the younger players related to the fact that their games were less formal and rarely played on designated courts but, rather, they adapted the playspaces available to them for their games, requiring a wide range of skills not necessary in the formal games.

The results of this study have important implications for the provision of space for Games with Rules in school playgrounds. Whilst formal Games with Rules were more than adequately provided for by schools in this study, the informal version was not. Given how often this less formal version was observed, and given the opportunities for the learning of social skills afforded in this play, it is important that it be encouraged.
This could be done by providing loose equipment more freely for children to use in the less formal versions of Games with Rules and also by the allocation of space for this play. Younger children may also benefit from the opportunity to sometimes use the spaces provided for formal Games with Rules such as ovals and courts.

5.2.2 Scientific/sensory

This category of play was first labeled during the pilot study when several examples of children engaged in sensory activity, learning about scientific properties of their world, were observed. By definition, this play category includes a wide range of activities. During playground observations in the major study, this type of play was observed in each school, in most playspaces, across all age groups and for both genders. The implications of this is that Scientific/sensory play shouldn't be ignored by adults because it was one of the most popular types of play observed in this study.

As seen in the photographs and discussed in the descriptions of the playspaces in School 1 this playground included many natural features such as grassed areas, dirt, bushy areas, garden areas and trees. It would be expected that there would be a lot of scope for Scientific/sensory play with so many natural materials available. While it seems surprising at first that this type of play was observed in only five areas, it is likely that in a playground such as this, there were many possibilities for all types of play and children had a large range of options. One interesting example in this school playground was in Area 1 where four boys from grade 3 experimented with skating on a piece of wood. This play continued for four days, twice a day, while they each took turns skating on a board along the edge of a retaining wall. On one occasion they were observed shortening the board by breaking off the end of it. During the observations they were seen falling from the wall many times during the experiment as they tested approach speed and their positioning on the board. They were learning about the laws of force and motion, the surface properties of the board and the wooden wall, the influence of weight and positioning on speed, the importance of balance and weight adjustment, the value of cooperation and collaboration. They were playing, they were learning collaboratively, and it was fun, but they were breaking the playground rules. If a supervising teacher had observed this play, it would have been stopped and the piece wood confiscated.
In School 2 scientific/sensory play was observed in more areas than any other type of play. In contrast to School 1, the playground in School 2 was barren and predominately asphalt. Against the odds, children in this school playground found many opportunities for scientific/sensory play, accessing natural materials as they became available. A good example of this was when children were observed near the brick walls of the school building where leaves were blowing in the wind and children were running through them and tossing them into the air (Area 9). During this play children were learning about air movement in this environment as they watched leaves swirling around and moving up and down the brick wall. They were noticing the properties of the dry leaves as they were easily blown high into the air. They actively participated in this movement with their own bodies as they chased the unpredictable leaves. It was play, it was fun. In the same area on another day children experimented with ways of carrying each other. Two children were forming a hand or arm grip to carry the third child. They tried different combinations until they arrived at one which was comfortable for all three. They were playing, it was fun. They were learning about weight bearing, force and motion, cooperation and negotiation.

In School 3 this type of play was equally popular with imaginative play and games with rules. Children had many areas which had been planted with trees and also many sand and dirt surfaces where they could explore the natural world and they did. This was the only school where the principal acknowledged the worth of providing natural materials such as rocks (Area 4) for the children’s play. These were indeed popular and children were observed playing on and around them at every observation. The principal of this school had also provided sandpits for children from upper grades to use and these were also very popular with children. Over several days a group of boys were observed in Area 2 closely watching a colony of spitfires in a small tree. During this time they were learning about the visible characteristics of these creatures. They closely watched the movements and responses as they touched the spitfires with sticks and they could be seen discussing what they were observing. They were clearly fascinated by what they were seeing and at the conclusion of the observation period, the spitfires appeared unharmed.

An interesting fact which the data revealed was that in each of the schools much of the scientific/sensory play was also illicit, with children using out of bounds areas or equipment in ways they were not allowed to do. Despite the possibility of being caught by supervising teachers and being removed from the play, it was surprising that children persisted with this type of play. This reinforces the idea of the intrinsic nature
of play, that play fulfills strong desires in children. That is to say, it was worth the risk for children to participate in the play of their choice.

During observations, it is was noticed that children in each of the three schools found ways to play out of view of teachers in areas which were classified as “out of bounds”. Numerous examples of this were observed in each of the three schools. In School 1 the tree trunks in the out of bounds “banks” area were worn smooth by children climbing on them, indicating that they were in fact frequently climbed. The ground around them was trampled and worn bare in many places. Also in School 1 children engaged in Scientific/sensory play which involved throwing objects onto a shade cloth sail (Area 6). This play continued over several days, beginning with the boys throwing objects they found in the surrounding area such as stones and sticks. They found that some would slide down the shadecloth and then fall back to the ground. Their play involved them trying to predict when the object would fall from the shadecloth and then trying to catch it before it hit the ground. Over successive days they brought objects from home to throw onto the shadecloth, such as small cars, balls and other toys. They were learning about friction, speed in relation to weight and the influence of the slope on the speed of the object. It was fun, they were playing and they were also involved in a process of collaborative learning. Although it was against rules to throw objects on to the sail cloth, children continued this play over several days when supervising teachers were not watching them. The fact that they ignored the researcher sitting nearby proved that she was not obtrusive nor impacting on play choices in this playspace. This play would not have been observed had the children been in view of a supervising teacher. It is interesting that such valuable learning opportunities as those provided during this type of play, were largely banned in the school playgrounds in this study.

This study has shown that this type of play is very popular in the playground and takes many forms. Children of all ages and both genders are intrinsically motivated to engage in it and the learning which occurs is evident and valuable. The implications for teachers is that awareness of this type of play would give teachers a range of opportunities for extension work in the classroom. Science could be contextualized in schools and playgrounds could include loose materials which would encourage children’s experimentation, with play such as that observed in School 3 where children roamed with magnifying glasses, investigating the young trees in Area 8. With increased understanding of the benefits, schools could allow children to play among plants and bushes and even climb trees.
5.2.3 Rough and tumble

Research has shown that this is a very important type of play (Pellegrini 1989, Bjorkland and Brown 1998) linked with social cognition, particularly in boys. Unfortunately, in the schools in this study, it was neither celebrated nor encouraged in the playgrounds; it was definitely unacceptable. In each of the schools it was viewed as a safety risk by both principals and teachers. None of the principals allowed this play in their schools and all teachers policed the rule which banned it.

In School 1 it was not surprising to observe that Rough and Tumble play was popular on the grassy banks area among the bushes. Here there was a soft surface and cover from supervising teachers, however children playing in this area were breaking playground rules because the banks area was out of bounds. Although it was a popular type of play in the banks area, it was more commonly observed in areas with asphalt surfaces. Children engaged in this play on asphalt surfaces were not observed sustaining any form of physical injury at all. This is supportive of the notion that this type of play is not linked with fighting. Ironically, this is the common misconception of teachers who discourage this play for fear of children getting hurt or because they believe it is fighting (Connelly, and Doyle, 1984).

In School 2 it was also observed in four areas. As this playground was predominantly asphalt, children had no choice of a surface to play on, and nowhere to hide from supervising teachers. This importantly reinforces the intrinsic nature of play, suggesting that children will play, no matter what. In this playground they were prepared to risk the consequences of being caught by supervising teachers engaging in play which was banned and also they were prepared to roll around on asphalt.

Although it seems very likely that the suggestion by Connelly and Doyle (1984) and Sutton-Smith (1994) that it may be because the majority of playground supervision is conducted by females that this typically male behaviour of Rough and Tumble play is seen as aggression is true, in this study a male teacher in School 1 was observed stopping this type of play. Surprisingly again, in School 3 this play was observed in two areas only, both on asphalt. In a playground where there were large areas of grass it is surprising that children would use asphalt as a surface for Rough and Tumble play. The findings in this study would suggest that the most important factor in this play is not the surface on which it is played. Something else overrides this; perhaps it is the
spontaneity of this type of play. Perhaps it is not planned for. Further research into this type of play, investigating how it begins, would be very interesting. It is also interesting to note that only boys were observed engaging in this type of play and that all age groups were involved. This is significant because it suggests that it may be a type of play that is important for boys right across the primary school years rather than at a particular stage. This study shows that this very important type of play suffers from a lack of understanding by adults, supporting findings of research previously mentioned. Teachers who realized the importance of it, for boys in particular, would not be so quick to stop it or confuse it with fighting.

5.2.4 Imaginary

Imaginary play has long been recognised as essential for children's learning (Freud, 1961; Piaget, 1962; Smilansky, 1968; Blatchford, 1989; Frost, 1992; Smilansky and Shefatya, 1990;). The learning possibilities in the areas of social, emotional development are well documented. It was surprising that teachers and principals in this study did not mention it. Although each of the principals interviewed in this study stated that the development of social skills was an important benefit of outdoor recess breaks, they did not realize that, as Frost (1992) explained, Imaginary play is an important vehicle for the learning of such skills in young children.

Imaginary play was one of the most popular types of play observed in each of the school playgrounds in this study. Children of both genders and of every age group engaged in this play. In School 1 much of the Imaginary play observed was in out of bounds areas. Children used bushes and garden areas as settings for their Imaginary play and were prepared to risk the consequences of being caught in these areas in order to engage in their Imaginary play. In School 2 children had no areas which provided privacy or hiding places for Imaginary play. There were no bushy garden areas and only a few sparse bushes around the boundary. In this setting the children adapted the fixed climbing equipment as a setting for their Imaginary play and were observed playing there on many days.

It was surprising to see that in each of the schools, fixed climbing equipment was regularly used for Imaginative play. This was unexpected because the design of such equipment would suggest it was to facilitate physical exercise and physical skill
Because children were observed in each of the schools using the fixed equipment for this play it is reasonable to suggest that it is commonly used in this way. Interestingly, principals in Schools 1 and 3 segregated children by age on this equipment, explaining that it was too dangerous to have young children and older children on the same equipment, suggesting that they perceived the fixed equipment as a place for physical activity, not Imaginary play.

Not surprisingly in School 3 the playspace containing the large rocks was the setting for Imaginary play during every period of observation. The large rocks were a very interesting and appealing addition to the playground. At times, both Imaginary play and informal Games with Rules were being played here simultaneously. The large rocks in School 3, (Area 4) were deliberately included by the principal who explained that originally, smaller rocks and stones had also been in this playspace. These loose objects were removed however, after a child was injured when hit by a small rock.

It is unfortunate when one minor injury results in an increase of perceived risk, prompting the removal of both fixed and loose objects. Another issue for supervising teachers is that during Imaginary play, children often like to create hidden places and cubbies, resulting in problems for staff wishing to have all children in view at all times.

During Imaginative play children often like to use props and loose materials (Nicholson, 1971; Hartle, 1996; Ihn, 1999). The Imaginary worlds created during this play, utilizing loose materials for construction and decoration and other purposes, to many adult eyes may look untidy. The issue of tidiness of the playground was discussed by each of the principals who listed litter as a major concern in their school playgrounds. This same problem was encountered in communities with adventure playgrounds when they were established in Europe (Bengtsson, 1972), where complaints regarding untidiness often resulted in the closure of playgrounds. The importance of supplying loose materials for children’s Imaginative play and allowing children to manipulate them at will is explained by Blatchford (1989) who stated that in the Imaginary games played by children, they can gain control of their environment and gain knowledge of sensations beyond their experience. With this understanding, the importance of encouraging and providing for this play in primary school playgrounds cannot be overstated.
5.2.5 Chants and rhymes

Chants and Rhymes were only observed in Area 7, School 3 and not observed in either of the other two school playgrounds. It was very surprising that Chants and Rhymes, researched and described in detail by Opie and Opie (1959, 1980) was not popular in the playgrounds in this study and only observed on one occasion in conjunction with a skipping game. It is possible that in colder weather children may engage in skipping games and hand clapping games to keep warm and that Chants and Rhymes may then become more commonplace. It would be an interesting future study to seek out examples of this play over a longer time frame than was designed for this study. It may be that this play is affected by seasonal changes and not as evident when children are less physically active in the very hot days of summer.

5.2.6 Popular

In hindsight it was beyond the scope of this research to identify play as influenced by popular cultural events, although some very obvious examples were recorded, such as the ‘soccer’ game in School 3, Area 5 when one boy called, “Imagine this is the world match”. It became obvious during analysis of data in this study that it was incorrect to include this category of play. It would have required a different style of observation, more prolonged and with a focus on what was happening within the play to document accurately all episodes of popular play.

5.2.7 Illicit

Many examples of Illicit play were observed in each of the schools in this study but in School 2, Area 2 where the size of the playground was small enough that supervising teachers had a good view of all playspaces, children had devised ways of playing without getting caught breaking playground rules. They climbed onto boundary fences to reach leaves and flowers from creepers growing too high for them to reach from the ground, even though climbing on the fences was not allowed, nor was picking flowers.
In School 3, the largest of the playgrounds, children could quite easily avoid the view of supervising teachers. Here they played among the small trees gathering insects and collecting things on a daily basis despite this area being out of bounds (Area 8). These observations raise the question of why children risk the consequences of playing in areas which are out of bounds and in play activities which are not allowed in their school playground. The pleasure of the play appeared to drive children to take risks with possible consequences such as being sent indoors, rather than forgo their play. This study was not designed to answer these questions but they are well worth investigating because of the frequently observed practice of children playing in places and in ways which break the rules.

Illicit play was also common in School 1 where the children were not allowed to play in the banks area along the border fences of the school, nor in the bushed or garden areas. It was evident by the worn tracks and smooth tree trunks that children played frequently in these areas and climbed trees often. The play they were engaging in was Scientific/sensory, Imaginative, Rough and Tumble and structured Games with Rules. Therefore it was not a particular type of play the children were attracted to but rather the natural environment and the play opportunities it provided. The principal’s concerns were based on safety issues regarding child abduction and injury from climbing trees. The perceived risk in this case resulted in the removal of play and learning possibilities for all children except those willing to risk the consequences of being caught by a supervising teacher in an out of bounds area.

It is important for principals, when making rules for the playground, to balance the perceived risk for children of injury and abduction with the importance of allowing learning to naturally occur during outdoor play. In this study there were many occasions when supervising teachers stopped children’s play to send them indoors to get hats on days which were cold and overcast. This slavish adherence to rules should be balanced with an increased understanding of the importance of the play children are engaging in. Importantly this study showed that some children will in fact play in areas even when they are breaking school rules. Rather than teachers and children working against each other in this regard, with increased understandings by the adults, play could be encouraged and scaffolded by supervising teachers.
5.3 Age groups and numbers of players

In each of the schools in this study, children engaged in a wide range of play categories across all age groups. This was extremely interesting because it means that certain types of play are not exclusive to certain age groups as was suggested by Piaget (1962). It is not true that only children in the early years of school engage in Imaginative play. It is also untrue that children in the upper grades are the only ones who like to play Games with Rules; younger children engage in this type of play also.

These findings are significant as they should influence rule making in playgrounds to provide opportunities for all age groups to engage in a full range of play. As previously explained in this study, younger children often played around the edge of basketball courts, imitating games the older children were playing but were not given the opportunity to use the courts themselves. Another important implication is that children should not be segregated by age in playgrounds because children across all age groups are then deprived of the opportunity to play together, engaged in play that interests them regardless of their age. If all age groups are engaging in the same range of play activities, it is not inconceivable that they would choose to play together if given the opportunity.

In School 1 crowding in the playground was not a problem however in Area 4 a disproportionate number of children played during each observation session. The diversity within this playspace may have attracted so many children and the most common type of play here was Imaginary. As well as fixed equipment, there was sand, bushes, trees, asphalt and shade and the whole area was used by children. This was the only playspace in School 1 where such a wide range of play types were observed and also the only playspace where there was such a high concentration of numbers.

An area with similar appeal in School 2 was Area 3 where all types of play except popular were observed and all age groups played there together. Every area in School 2 was crowded so numbers were not a measure of the popularity of a playspace in School 2. Area 3 in School 2 had features in common with Area 4 in School 1, these being fixed structures, shade, trees and asphalt.

In School 3 an area which attracted many children and where they engaged in a wide range of types of play was Area 2 where again there was fixed equipment, sand and
some shade and children engaged in a wide range of types of play. However, interestingly in School 3, Area 10 was the most crowded, and was occupied by children of all age groups. Area 10 had an asphalt surface, fixed structures, shade and small trees all features found in the most popular areas of schools 1 and 2. It is surprising that, given the option, in schools 1 and 3, many children would play on asphalt areas in such hot weather, rather than on grass.

5.4 School playground design

Using the definitions of traditional playgrounds as described by Bengtsson (1972), Hayward et al. (1974), Frost (1981), Pellegrini (1995) and Moore and Wong (1997), each of the schools in this study can be identified as having a traditional playground, containing fixed structures, areas of asphalt and playing fields. These researchers all agree that traditional playgrounds are geared towards exercise or functional play and therefore most of the space is devoted to sports fields and space for organized games.

They all indicate that traditional playgrounds promote formal Games with Rules but do not encourage Imaginative play. Importantly, the findings in this study show that children commonly engaged in Imaginative play on the fixed equipment. This is very interesting and would suggest that, as pointed out by Huizinga (1949), children will create spaces for their play given what is available. Again this reinforces the intrinsic nature of children's play and the view that they will engage in the play they choose, despite being encouraged by adults to use fixed play equipment in ways they view as appropriate. Given the different ages of each school the fact that they were all 'traditional' illustrates an ongoing lack of understanding of children's play needs.

Research indicates that when children are involved in decision making processes related to their playgrounds, the results are beneficial to all stakeholders, including the wider community (Schaffer, 2005). In this study, children were not involved in such decisions in their schools. There was no evidence of teachers being involved either. All decisions about the playgrounds, from rule making to the removal of old equipment and the purchase of new equipment, was made solely by principals.

Like Moore and Wong (1997), Olwig (1990) and Taylor (1993) are advocates for the involvement of children as key participants in the design process of their school
playgrounds and say that children should also be involved throughout the construction process and participate in sustaining the landscape. This was not evident in the schools in this study either. The potential to involve teachers, children and the local community was certainly there with regard to the creation of the native garden in School 2 and the frog pond in School 1. In neither case however, were any of these stakeholders part of the process. It is not surprising that the only person who spoke enthusiastically about either project was the principal. The principal of School 3 discussed the frog pond which had been built in front of the school and further developments which are planned to enhance this habitat. However, although she said that children play there, the children in the focus group at this school said that it was out of bounds. In School 2 the indigenous garden which had been constructed, took up a significant area of this very small playground. Native grasses were being planted and a brick pathway winds through the space (See Figure 84) but children were not allowed to touch the plants or walk among them. They were not involved in the design or construction of this area and did not mention it in their discussions of their playground.

Importantly, although no children in the focus group interviews described any involvement in changes to the playground, they had many suggestions for improvements which sounded practical. For example in School 1 a child suggested that chicken wire be placed under a particular section of boundary fence to stop balls continually rolling under the fence and onto the road. Rivkin (1995) believed that we must foster our next generation of environmentally aware adults by allowing children to experience the outdoor environment and encourage their interest in it. She also explained that the playground offers endless opportunities for open ended questions that help children think through problems.

The perceptions of the children interviewed were sometimes at odds with the understandings expressed by the principals. An example of this was in School 1 where children thought the treated pine equipment had been removed because it could make you sick whereas the principal described it as outdated and that his decision was influenced by the belief that all schools were getting rid of it.

During interviews the principals discussed their playgrounds and various playspaces and equipment without reference to any other decision makers. Each principal commented about the influence of what other schools are doing. For example, the principal of School 1 said that he had removed tyres from the playground because all
schools were doing the same. This may suggest an element of competition between schools, for playgrounds which are ‘up to date’ and visually appealing to adults, or at least, it suggests a strong awareness of what other schools are doing.

5.5 Types of equipment and playspaces and their use by children

Each of the playgrounds in this study has a traditional design. In each school, during most observations, the children used these courts for the formal Games with Rules for which they were designed. Areas of asphalt without painted markings were used by children for informal Games with Rules such as chasey and adaptations of formal games. Surprisingly also, the asphalt surface was where most Rough and Tumble play was observed.

Schools 1 and 3 also have large grassed ovals and the children used these for formal Games with Rules such as cricket and soccer. Only boys played on the ovals during the observation sessions and in quite small numbers compared to the total number of children in the playgrounds. In Schools 1 and 3 there was time allocated for different age groups to use the ovals on certain days and they were only used for games which are traditionally played by boys.

Each of the three playgrounds had prefabricated fixed equipment. In School 2 there was one structure and it was available for use by all children at all times. In the other two playgrounds there were several fixed structures and each was allocated to certain age groups. Children in these two schools stayed at their designated equipment during the observation periods and this equipment was always crowded. The children in the School 3 focus group said that the amount of fixed equipment should be doubled as it was dangerously crowded.

Schools 1 and 3 also had sandpits where children played. These were designated for different age groups in both schools and children adhered to this during observations. The sandpits were not supplied with loose equipment for children to use in their play and they were observed improvising with sticks for digging. They were also observed
with small toys probably brought from home. These were popular with children, mainly boys being observed there.

Each of the three playgrounds had permanent seating and shelters with seating inside. During the observations, no children were seen using them to sit in which is interesting because many of the observations were made in very hot weather. In School 3, Area 5 the shelter was observed being used by a group of grade 3/4 girls playing a ball game and on another occasion a group of grade 3/4 boys playing a ball game which continued over four observations. In School 3, Area 1 the shelter was used by a small group of Prep children for Imaginative play. It is likely that such constructions may be appealing to adults, possibly being thought as practical places for children to sit and seek shelter. Interestingly during observations, children were not seen using them for these purposes.

This study clearly demonstrates that children were adapting what was available to them, using playspaces for the type of play they desired Hart (1997). Frequently they were using structures in a range of interesting ways involving different types of play. Clear examples of this, previously described in more detail under the headings of Scientific/sensory and Illicit play are: boys experimenting with a piece of wood for skating along the top edge of a retaining wall (School 1, Area 1); group of grade 2/3 boys engaged in throwing objects onto a shade cloth structure (School 1, Area 6). These are only two examples that illustrate ways children have used structures for learning about their world, in ways they were not originally intended. Many other examples are shown in the data. Interestingly, in Schools 2 and 3, principals promoted, during interviews, the development of areas for children’s learning: In School 3 the gesture of creating a frog pond had similar results to the creation of an indigenous garden in School 2; both were not available for the children to use.

5.5.1 Fixed equipment

The significant changes to the physical environment in today’s Australian primary school playgrounds described by Evans (2003) which, he explained, have resulted in unappealing environments with minimal play equipment and rigid rules, were evident in this study. In each of the schools, principals described the removal of play equipment over recent years because of perceived dangers. However, observations
indicated that despite the changes as described by Evans, children still engaged in a wide range of play activities. Despite the removal of the “old” equipment which was being taken from the playgrounds in this study, children were still able to adapt what was available to meet their needs. This ability of children to make use of what is available was described by Pellegrini (1996), Hartle (1998), Inh (1999) and Armitage (2001). Although Aguilar (1985) described fixed play equipment as a barrier to play, children in this study used it in a range of ways, mostly as a prop for Imaginative play. That is to say, they used it creatively as a setting for a range of role plays some of which were also chasing games (See School 1, Area 4; School 2, Area 6; School 3, Areas 2 and 3). All the play observed in School 2 on the fixed equipment was Imaginative so the fixed equipment in each of the three schools in this study could not be described as a barrier to play.

Huizinga (1949) and Frost (1992) both indicated the importance of the positioning of fixed equipment and playspaces. It was not possible to tell from the observations in this study how positioning of fixed equipment was influencing play. In Schools 1 and 2 the fixed equipment was not segregated from other playspaces, however in School 3 it was in a separate area. In each of the three schools the fixed equipment was used creatively by the children rather than as a place where motor skills could be developed and surplus energy burned off. A close and prolonged study of an area such as School 1, Area 4 would show whether play on the fixed equipment led to play in the various surrounding areas, as suggested by Frost. It would be very interesting to investigate the connections between the location of fixed equipment and play which begins there and moves to other areas.

Although designers and researchers claim to have tried to improve the quality of manufactured playground equipment (Freidberg and Berkley, 1970; Hewes and Beckwith, 1975; Rivkin, 1990; Thompson, 1996; Frost, Wortham and Reifel, 2001), it is possible that concerns for safety standards, although essential, may have outshone the play needs of children. The voices of the children interviewed in this study indicated dissatisfaction with the design of modern fixed equipment.

The children reflected lovingly about treated pine structures and tyres which had been removed in School 1. During the focus group interview, child 3 said,

*The only change I’d like to see in my whole life is the old playground back…I like the new playground. The only thing about the old playground that’s bad,
they need to rebuild it. During the same interview child 1 said, *Mostly people get hurt on the new equipment.*

During the focus group interviews, children’s comments were interesting regarding the modern, brightly coloured fixed equipment present in so many school playgrounds today. The comments of the children from schools 1 and 3 who had access to this type of equipment, spoke only of the shortfalls in design and aesthetics, although one child from School 1 described the appeal of the bright colours compared with the dull treated pine structures.

It is possible that designs created by children and adults jointly, as described by Schaffer (2005), may result in fixed equipment which children are delighted with rather than critical of. Inh (1999) discussed the ways that children liked to gather underneath structures for privacy, meeting together and resting. In School 1 where there are still some treated pine structures with platforms at least 1 metre above the ground, children were observed gathering in these spaces. In Schools 2 and 3, however where all fixed equipment was the newer tubular steel designs, platform spaces were small and only centimetres above the ground. With these modern structures, there is no possibility of children finding places underneath structures to gather or hide.

### 5.5.2 Loose equipment

Nicholson’s theory regarding loose parts stated that in any environment both the degree of inventiveness and creativity, and the possibility of discovery, are directly related and proportional to the availability of loose objects, e.g. stones, sticks, leaves or pipes which children can manipulate in their play. Loose objects and materials in the environment give the added opportunity for experimentation and creativity (Nicholson, 1971). In the three playgrounds observed, there was very little evidence of loose parts available for children’s play. Principals described the need for tidiness and all described littering as a major issue. Any loose objects would not remain in the playground for very long.

A few children were observed in each of the playgrounds playing with props brought from home, usually small cars or dolls (See School 1, Area 4; School 3, Areas 4 and 11). The possibility of empowerment gained when children can create and change
their environments described by researchers (Hart 1979, Moore 1986, Stine 1997) was not available in the playgrounds in this study. Children were observed attempting to use loose objects at times for their play. For example the observations in the sandpits of School 3 illustrate this, with children using small toys brought from home in the sand. In School 1, Area 5, three boys from grade 3 and 4 built with sticks gathered from the banks area. The next day the sticks had been removed from the playground.

In this study the only examples of loose equipment being supplied by schools for children's play was in the form of sports equipment such as bats and balls. There were no natural materials supplied, in fact whenever sticks, stones or other natural materials were found in the playgrounds of the schools in this study, they were promptly removed. The possibility of children manipulating these type of materials in their play, increasing the potential for creativity and inventiviness (Nicholson, 1971), was negated. In fact children were banned from areas where they may have found sticks, leaves and stones in School 1.

In School 2 any natural loose natural materials were accessed by children reaching over boundary fences, again a practice banned in that playground. In School 3, although there were natural features introduced into some playspaces such as the large rocks, these playspaces were free from loose materials. Evans (1998) described Australian playgrounds as usually being devoid of loose materials and this is well supported by this study. As pointed out by Evans, adult perceptions of suitable playgrounds included the notion of neatness. As previously mentioned, in each of the schools in this study, principals described littering as a big problem and keeping the playgrounds tidy was a priority.

Rivkin (1995) and Davies (1997) both described play in the outdoor environment which includes loose natural materials as enabling children to experience mastery and control over their world, something which may be increasingly rare in contemporary society where children's lives appear to be becoming more organized by adults. It was interesting in this study to observe that many children had a strong desire to explore their natural world. In School 3 children were often observed actively exploring sand, trees and the creatures living in these environments. In School 2 there were also examples of children playing with leaves, flowers and natural materials, they seized every opportunity, even when this required breaking playground rules. In School 1 children also explored their natural environment often in out of bounds locations. This playground had areas which contained natural features which could have provided
many opportunities for exploration and learning about the natural environment, had children been allowed to play there.

5.5.3 Use of playspaces

The appeal of small places where children can hide is well recognized as particularly valuable for Imaginative play and solitude (Kirkby 1984, Moore and Wong 1997, Stine 1997). Appleton (1996) discusses the pleasure children have in places that offer the ability to see but not be seen. During the focus group interview in School 1 this perspective was reinforced when child 3 said,

I just want to play somewhere private because what I don’t like is the places where there are too many teachers around.

In School 1 the best opportunity for hiding was among the bushes in the banks area. Disappointingly this was out of bounds so children had to risk getting caught should they wish to play in this area.

In the playground of School 2 there was absolutely no opportunity for children to have any privacy because of the numbers of children and the small size of the playground. In such a case, it is even more important that opportunities are provided in the form of bushy areas and structures for children to hide in. In School 3, although the playground was very large, it was also very open and uncluttered and the principal commented that it is important that all children are visible.

Stine (1997) identifies the value of perching places as does Hart (1979) but in these three schools, perching equated with danger of injury according to comments by each of the principals. The desire of children to perch was evident during the focus group interview in School 2 when one child commented,

Its fun getting on top of them [monkey bars]…just staying up there in the fresh air is nice…

Unfortunately this practice was against playground rules and children who perched on top of the monkey bars risked being withdrawn from play. In School 3 the principal
commented that children liked to climb on the boundary fences and that this had to be banned due to complaints from neighbours.

Whilst the finding of Malone and Tranter (2003) that interesting and diverse spaces increased the intensity of play may be true, their other finding that the range of play behaviours can also be increased, was not proven in this study. The findings in this study clearly show that children engaged in a wide range of types of play by adapting what was available to them in their playgrounds.

The important point about the quality of opportunity, made by Moore and Wong (1997) raised the issue of whether there would be an increase in explorative environmental play if the environment was more natural and inviting. School 2 had no inviting natural play spaces however the children engaged in as much Scientific/sensory play as the children in Schools 1 and 3. A detailed exploration of play in inviting natural playspaces would be a very interesting future study.

Choice of activities, play areas and play equipment is considered in Guidelines for School Playgrounds (DEET, 2005, Section 3.3). When listing the types of playspaces which should be available to children in schools, this document recommends firstly areas to accommodate Games with Rules and does also include areas for ‘dramatic play/role-play and/or Imaginative games (might include decks, cubbies and a shaded area)’. The findings of this study show that a huge change in the valuing of play by adults would have to occur before playspaces specifically designed for Imaginative play would be a common feature in school playgrounds.

This study has shown that teachers and principals have little idea of how children are playing in the playground or how they are using equipment or playspaces. This is not surprising considering that teachers and principals in this study had a limited understanding of why children are playing in the ways they do. This may be a widespread issue for principals, teachers and adults in general, as pointed out by Evans (2001). As part of the suggestion to provide sand play areas, dirt and water, there is also mention of play with loose materials (DEET, 2005). In this study principals banned play with loose natural materials and play with dirt or water.

Observations in School 1 support what has just been discussed where a comparison between the play observed in Areas 4 and 5 is interesting. Area 4 includes an asphalt netball court, a treed area with two shelters, two pieces of fixed equipment, a sandpit
and a grassy, bushed bank which is out of bounds. A large number of children from grades Prep to 4 played here and the most common type of play was Imaginative. Area 5 however is a barren asphalt area with painted netball and downball courts. On one side are cricket nets and a sandpit for long jump. This area had no shade. It could not be described as diverse and appealing. This area does, however, support the same diversity of play types as Area 4, suggesting that children’s play was not inhibited by this particular low quality environment, a similar finding to that described in the playground of School 2. In other words, a playspace that an adult may describe as visually unappealing, that is predominately asphalt, can still be a place where children engage in the same types of play as children in playspace containing trees, gardens, equipment, sand and grass.

5.6 Children’s perceptions of their playgrounds

Titman (1994) suggests that the outdoor school environment has power over not only children’s play choices but also over their self identity and self worth within the school environment. She collected and summarized the feelings children expressed in relation to physical features of their school environment. Her findings (in italics) relate to the data from this study in the following ways and have been set out in the following format for ease of comparison:
<table>
<thead>
<tr>
<th>Feature in question</th>
<th>Children’s views expressed in this study</th>
<th>Teachers views</th>
<th>Principals views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>Favourite place, spacious, good for running.</td>
<td>dangerous</td>
<td>Expensive to maintain Practical</td>
</tr>
<tr>
<td>Grass</td>
<td>Uneven surface on oval</td>
<td>Uneven surface on oval</td>
<td>Uneven surface on oval dangerous</td>
</tr>
<tr>
<td>Trees</td>
<td>Home for insects and other creatures.</td>
<td></td>
<td>Dangerous to climb</td>
</tr>
<tr>
<td>Flowers</td>
<td>Colourful and nice smell</td>
<td></td>
<td>Out of bounds will spoil the young plants.</td>
</tr>
<tr>
<td>Mud and Sand</td>
<td>Favourite place the sandpit</td>
<td>Children throwing sand is dangerous</td>
<td>Valued in schools 1 and 3</td>
</tr>
<tr>
<td>Bushes and Dens</td>
<td>Out of bounds, highly valued</td>
<td></td>
<td>Out of bounds Dangerous</td>
</tr>
<tr>
<td>Ponds</td>
<td>Out of bounds</td>
<td></td>
<td>Dangerous for children Valuable for learning (frog pond School 3)</td>
</tr>
<tr>
<td>Fixed Play Equipment</td>
<td>Colourful, fun,crowded.</td>
<td>Crowded sometimes dangerous</td>
<td>Expensive Desireable</td>
</tr>
<tr>
<td>Furniture and Fixed Structures</td>
<td>Not mentioned</td>
<td>Not mentioned</td>
<td>Important to provide Expensive</td>
</tr>
<tr>
<td>Litter</td>
<td>Not mentioned</td>
<td>Not mentioned</td>
<td>A big problem</td>
</tr>
</tbody>
</table>


- ugly, hard, dangerous, cheap.
- gentle, good for games, sitting, rolling, lying, contains hidden things.
- climbing, challenge, ever changing shape and colour, shade and shelter, living things.
- aesthetic values, sensory, symbolic of a cared for school environment, children’s own gardens were symbolic of ownership of their playground.
- mud meant fun but also getting into trouble for being dirty, sand similar but sandpit a lesser version than sand at the beach.
- usually out of bounds, places to hide - dens, the most highly valued features of the playground, privacy, the potential for ownership.
- symbolic of the living world, fascinating creatures, needs to be cared for.
- often boring, brightly colored equated with babyish. In each school children discussed the fixed equipment.
- exposed, vulnerable, children valued places to sit in rather than seats or benches to sit on. Shelters were good shade and protection from rain.
- signifiers of neglect.
Titman (1994) believed that children read these messages and meanings from a range of signifiers which frame the cultural context of the environment. This was not apparent in the data in this study. It can be clearly seen in the table above that the children in this study did not always have the same views as the children in Titman’s study. In this study, the most popular playspaces in each of the schools were asphalt, which is not in agreement with Titman’s assessment of children’s views of asphalt. It can also be seen that the teachers and principals held different views about many of the features. This shows that adult evaluation of environmental aesthetics can be different from those of children as can the views of principals and teachers be quite different.

The adults and the children in this study did not share the same concerns about the playground and did not value the same features. This was the case in the communities where there were adventure playgrounds in the adventure playgrounds of Emdrup where, despite the joy experienced by the children playing there, many adults did not want these playgrounds in their neighbourhoods because they saw them as untidy and unappealing (Bengtsson, 1972). Parallels may be drawn in this study with regard to sticks falling from trees and bushy areas which were both seen as untidy and undesirable by adults but were valued by children.

School landscapes hold tremendous potential to enrich childhood experiences, integrate curricula and foster community interaction, and school sites need to be redefined as engaging environments for learning and places that celebrate nature and civic life (Schaffer, 2005). The insistence on neat and tidy school playgrounds without loose natural materials is restricting the play opportunities of children. Piles of grass clippings and naturally occurring piles of autumn leaves provide many opportunities for play and learning. This makes it more important to include children in the design and construction of outdoor playspaces and also in the redesign of playgrounds.

If adults truly understand the importance of outdoor play to children’s learning, providing playspaces with many affordances for play will be important in schools. In this study it is evident that most of the money spent in the provision of playspaces and equipment in the playgrounds is allocated by principals with no evident consultation with other stakeholders. It is also noticeable that the aesthetics that adults find so appealing such as outdoor shelters, modular play equipment and tidy playgrounds with no loose equipment provided, are not what children interviewed in this study would choose.
The results of this study showed that children gave considerable thought to design improvements for their school playgrounds, both creative and practical. In School 3 the children talked about the need to have more fixed equipment because of crowding and also the need to have more basketball courts. They described the crowded space as dangerous and mentioned injuries which have occurred. One of the children suggested that if they could “double everything” in the playground, the problem would be solved. In School 2 the children also described a need for more equipment including slides and swings.

In School 2 one child explained that a tree needed to be chopped down because it contained bull ants. Another child argued that the bull ants were in their natural habitat and that it was good to leave the tree. Here was a valuable opportunity to involve children in the discussions around the decision about this particular tree’s future. The children in School 1 discussed the new fixed equipment and agreed that it is more dangerous than the old treated pine structures. They reminisced about the play they engaged in on these structures, both Imaginative and Scientific/sensory. Another child in School 1 talked about his need for a private place to go where teachers aren’t constantly watching. Two children described their differing tastes in aesthetics in the playground, one preferring the brightly coloured equipment and the other preferring the wooden more natural structures. As was found in Canada, children usually offer many sensible suggestions for making the school grounds healthier, safer and more child-appropriate (Canadian Biodiversity Institute, 2005). During interviews in this study, children did make a range of alternative suggestions about management of the playground such as, in School 1, fencing off an area where snakes had been seen. This sounded feasible, however these views had not been sought by the principals.

The findings of the study conducted in Canada, previously mentioned, would provide a useful model in Australia (Canadian Biodiversity Institute, 2005). If children took an active role in playground maintenance such as raking leaves, gathering sticks and leaves and gardening, in addition to the practical value, there would be significant opportunities for learning about the properties of the natural world. Natural materials such as these can be part of many play and learning activities as demonstrated in the adventure playgrounds of the world and by Schaffer (2005) in Germany where children are able to construct with sticks and stones, dirt and water and all kinds of natural materials. Such open ended play activities provide opportunity for endless learning.
5.7 Social skills in the playground

Previous research, as reviewed in the literature, has shown that children gain many new social skills while playing in the playground. In each of the three schools in this study, children were observed engaging in play which facilitated social development, particularly informal Games with Rules as described by Flemmen (2005). In School 2, the smaller of the three schools, boys and girls of all age groups played together, something which the principal of this school said she had never seen in other school playgrounds. This was very interesting to see and initially it appeared that this practice facilitated team games, that is, all the children were needed to form teams. The data showed however, that many children in this playground were not engaged in team games, a fact which was not initially visible given the crowded playground. It appeared that children grouped together across age levels for another reason. It is possible that maybe language was a factor, with 130 students and 16 languages other than English spoken by the children or possibly children were grouping in family or cultural groups for play. It was beyond the scope of this study to investigate this but it would be very interesting to research.

In Schools 1 and 3 there were large numbers of students and areas were segregated by grade level and inadvertently by gender. Children did not have the same opportunities to socialize with children from a variety of grade levels and when organizing teams did not have the need to seek children from other age groups to make up numbers. There was a belief expressed by the principals of Schools 1 and 3 that segregating children by age made them less likely to be injured whilst playing. Both principals explained the need for children to be segregated by age when playing on fixed equipment and when playing in some playspaces such as basketball courts and grassed ovals. This is unfortunate for those children of younger age groups who have developed skills equal to or superior than children of older age groups. The data collected in School 2 showed that children of all age groups and both genders could play happily together without segregation of any type. In Schools 1 and 3 however, principals assumed that younger children would have a lower level of physical development and would get hurt if they played on the same equipment as older children, they made no allowances for exceptions to this.

In School 1 the grassed oval area was allocated to middle primary grade level boys. Certain days were offered for grades 2/3 and other days for grades 3/4 in a cyclical
5.8 Gender related issues of the playground

The schools in this study provided possibilities to investigate issues around gender, however it was beyond the scope of this study to explore in detail the influence of gender on the play choices of children. This would have required prolonged observation of play episodes. By scanning the play which children were engaging in it was possible to see clearly that boys in schools 1 and 3 were occupying more space in the playgrounds of their schools than the girls. This is in line with what Thorne (1993) found regarding allocation of playground space. Another conclusion in this study was that the playgroups of boys in schools 1 and 3 were larger than the playgroups of girls. This was a finding which Ladd (1983) arrived at. What is particularly interesting in this study is that in School 2 boys and girls played together in all the playspaces at most observations. It is beyond the scope of this study to know why this occurred and any conclusions based on the data collected in this study would be guesswork only. The finding that boys are more physically active than girls (Eaton & Enns, 1986) was not supported by the observations in School 2 where all play at all grade levels was mixed gender.

When the principal of School 1 spoke about allowing some children to stay inside at recess to use computers or read, he said those that chose to were mostly girls. This supports the finding that, given a choice, boys more than girls prefer to go outside at recess (Finnan, 1982; Lever, 1976; Blatchford et al. 1990). This may be because boys
like the physical possibilities of the playground whereas girls do not or it may be, as suggested by Birns and Sternglanz (1983), that girls prefer the indoors where they will not be disturbed.

Pellegrini and Blatchford (2000) suggest that there may be gender bias by teachers in their observations of play, with female teachers being less tolerant of the physical play of boys. While this was evident in School 2 where a female teacher stopped Rough and Tumble play on two occasions, on another occasion in School 1, a male teacher stopped this type of play.

Looking broadly at the types of play boys and girls chose to be involved in, some interesting findings emerge. It was not surprising to observe that mostly boys played formal Games with Rules in both Schools 1 and 3 however in School 2 both genders participated equally. More boys than girls, across all grade levels, engaged in Scientific/sensory play than girls however many girls did choose this play also. Imaginary play was not just the domain of girls; many boys engaged in this play and often boys and girls played together. Not surprisingly, only boys were observed engaged in Rough and Tumble play and interestingly, this was across all grade levels, further supporting Thorne’s (1993) findings.

5.9 The impact of current school policy on children and their play in the primary school playground

5.9.1 Making rules

The principal in School 1 said that there were not separate rules for the playground but a set of school values which govern behaviour in both classrooms and playgrounds. He then made an extensive list of specific rules for the playground including a list of out of bounds areas and activities which were not allowed such as climbing trees. He was adamant that safety concerns do not impact on school rules however the children in this school described safety concerns as the driving force behind most of the rules. Children described such possibilities as, getting run over by a car, being bitten by
snakes, strangers hiding in the bushes and children falling out of trees, should a child choose to break certain playground rules.

The principal in School 2 also said there are no hard and fast rules in the playground then, like the principal from School 1 described quite a few specific playground rules. The children in the focus group in School 2 had an extensive list of rules, most of which focused on the emotional well being of others, that is, a concern for the feelings of others. For example, they were concerned about actions which would hurt others’ feelings, confuse others, make others feel unwelcome and damage the property of others. In School 3 the principal, when asked about playground rules, only mentioned that some areas of the playground were designated as quiet where no running was allowed. The children in the focus group in this school, however, listed many specific rules of the playground, mostly focusing on Rough and Tumble play. For example they included, no play fighting and no tackling. Interestingly, in each school the principal contradicted their assertions that playground rules were either non-existent or few by then listing quite a range of unacceptable behaviours in the playground. In each of the focus groups, children had a clear list of playground rules to describe which was quite extensive.

In the teacher questionnaire responses, teachers were similar to the focus group children in that they had a clear understanding of what was unacceptable in the playground. It appeared from the responses of teachers that they in fact had little input into the formation of rules. In Table 2 very few teachers were involved in staff discussion about formulating general playground rules, however it was more common for teachers to be part of rule making for individual students.

In School 1 during the focus group interview one child explained that children can have input into playground rules via school council representatives. The children in Schools 2 and 3 did not describe any systems whereby they could be involved in playground rule formulation. In this study, teachers and children did not display the same sense of ownership for the rules of the playground as the principals did. In each of the schools, however, there was some scope for teachers to create incidental rules for specific incidents and specific children (See Table 1); this was particularly evident in School 2 where 7 out of 11 teachers felt empowered to do so.
5.9.2 Enforcing rules

In each of the three schools there were varying procedures in place for children who were caught breaking playground rules, however the consequence was always the same: they were denied play time. In School 1 children were either sent inside or were asked to sit on a seat in the playground. In School 2 children were commonly asked to walk around the playground with the teacher on yard duty or go to a specified seat for time out. School 3 also required children to sit on a seat in the playground or go indoors. The children in the focus group in School 3 explained that there was a 15 minute time out policy when playground rules were broken.

Pellegrini and Glickman (1989) stated that “without recess children lose an important educational experience” (p. 4). Recess is the right of every child. Article 31 of the United Nations Convention on Children’s rights states that every child has the right to leisure time. In this study there was no evidence that principals or teachers felt that taking away recess, whether as a disciplinary measure or abolishing it in the name of work, infringed on that right.

The rules of the playground in each of the three schools were similar in that they all adhered to some of the guidelines of the Anti Cancer Council of Victoria Sunsmart Policy such as the wearing of hats when children are outside. Children in each of the schools were reprimanded by supervising teachers if not wearing a hat at playtime. In School 1, one teacher on yard duty lamented that it was difficult to make them wear hats on a cold overcast day. Supervising teachers enforcing the policing of hat wearing interrupted play in all schools but had little long term impact on the play with children complying and then resuming play. Each of the schools in this study had areas shaded by shade cloth. However, these were few and the majority of children in each playground played in the sunshine. No children were observed being sent inside for breaking rules during the observation period suggesting that it is not a common occurrence. Instances in School 1, where children were told to stop playing in bushes, only momentarily halted play and it resumed when the supervising teacher had moved away.
5.9.3 Segregation of children in the playground

In each of the playgrounds in this study the issue of segregation of children in the playground was quite different. In School 1 playspaces were allocated to different age groups and this resulted also in segregation by gender. In School 3, the only areas designated for certain age groups was the fixed equipment. Other than that children from all grade levels could play wherever they chose. The result was the same however, and in School 3 gender segregation also occurred. The rules relating to grade levels and access to playspaces and fixed equipment were rigidly adhered to by children in schools 1 and 3. Within their ranks, children had a strong sense of territorial ownership and seemed able to police this themselves as evident in School 1 where, during the focus group interview, children discussed the timetabled use of the oval and knew in detail which days each grade was allowed to play there. No examples of teachers being required to intervene were observed. In School 3 the only areas which were segregated were the fixed equipment structures, which were designated for different grade levels. The principal said this was for safety reasons and that mixed age groups on these structures would result in younger children getting hurt. This opposes the view of Moore (1986) who discussed the range of physical abilities of children and their variation across age groups. Moore encouraged the idea of children of mixed ages playing together on equipment so that children of similar ability levels could play together. In School 2, no segregation by age group occurred and all children were allowed to play everywhere; this was however such a small and crowded playground that there was no option. Interestingly in School 2 children were commonly observed playing together in mixed age and gender groups.

5.9.4 The context of each school

Each of the schools in this study was built during different eras of education in Australia. School 2 was constructed in 1874, eighty-eight years later School 1 was built and thirty-four years later, School 3 was built. Interestingly, each of the school playgrounds had many similarities. Schools 1 and 3 both had grassed ovals and asphalt courts for formal Games with Rules. Each of the three schools had large areas of asphalt surface and invested in expensive fixed equipment.
The principal described most of the children attending School 2 as living in high rise flats and staying indoors after school. She linked this with a perceived lack of the social skills to join play during recess breaks in the playground and described the children as preferring to sit around rather than play. Interestingly the judgement was made by this principal that compulsory playing of structured formal Games with Rules, under adult direction, would be a solution to this perceived problem.

As mentioned previously, the principal in School 2 employed ancillary staff who actively taught formal ball games in the playground and encouraged children who regularly sat on the sidelines to join in. Although teacher involvement in play can enhance learning, research also notes that children need to engage in free play, alone and with peers, without interference from adults (Christie and Wardle, 1992). The principal described the children in School 2 as lacking the skills to join play, however, during the focus group interviews, the children from School 2 described in intricate detail many of the informal Games with Rules they play in the playground. Such involved games were not described by children in the focus groups of either of the other two schools in the study. Given that there were 130 students in the playground and 16 languages other than English were being spoken, children's ability to negotiate and play the games described indicates very well developed communication skills. There was no understanding expressed by the principal of School 2 regarding the games described by the children in the focus group. During playground observations in School 2, no ancillary staff were observed teaching children games but children were playing nevertheless. It was not evident during observations that there was a problem associated with children sitting on the sidelines, very few examples were observed of a child sitting watching play.

The children in School 3 were described by the principal as living in a new growth area with predominantly large houses on small blocks of land, resulting in small backyards with little opportunity for outdoor play at home. Although it was not mentioned by the principal or the teachers, it was observed that many children in this playground were overweight compared with children in the playgrounds of the other two schools in this study. In School 1, children were described by the principal as predominantly from families who had lived in the area for many years. There was little cultural diversity in the school community with most families of anglo-saxon descent. Most of the children lived in houses with large backyards, compared with the homes of children from the other two schools. It is likely that these children had an opportunity to play outdoors at home.
5.10 Factors influencing current school playground policy

Although principals gave the impression that both teachers and children were involved in the process of playground policy development, teachers and children in the schools in this study did not feel involved in any way in the process. In this study it was evident that principals were solely responsible for formulating playground rules. It was surprising, in each of the schools, how much principals were influenced by fear of litigation as they described the removal of fixed and loose objects connected with children's possibility of injuries. They also described practices other principals were adopting in their schools, and said this was a reason for changes in their own schools, such as removal of afternoon recess breaks, removal of tyres from playgrounds and removal of treated pine fixed equipment. Another extremely important factor for principals was the maintaining of playgrounds which are appealing to adults. They described neat mown grass, tidy garden areas, brightly coloured fixed equipment and no sign of littering as important whereas the children in the focus group interviews did not mention any of these features as important in their playgrounds. In this study, decisions to spend funds on playground equipment were made by the principal as was the choice of equipment. Also decisions relating to removal of equipment from the playground were made by the principal.

5.10.1 Perceived dangers

In each of the schools in this study there was a sense of perceived danger as sometimes not matching real danger. In some instances the fear was not founded on fact. A good example of this was in School 1 where the principal discussed removal of treated pine fixed equipment because of the danger it posed in relation to the arsenic used in the treatment process. He also said that other schools had removed this equipment for the same reasons. According to APVMA (2005) this fear of poisoning was completely unfounded. The unfortunate aspect to this example is the sadness of the focus group children in School 1 as they described treated pine equipment which had been removed and the many ways they had played with it. In their view it had been a valued addition to their playground.
The principal in School 1 did not want children playing near the boundary fence of the school either as he saw the possibility of abduction as an issue. It would be interesting to know why this was such a concern because it deprived children access to a valuable natural environment for play, which some children played in anyway, even though it was against playground rules. Interesting also was the decision by the principal in School 3 to remove smaller rocks from the playground when a child sustained a minor injury when hit by a stone. Rather than using this opportunity to teach children about safety issues when playing with loose objects, this principal decided to remove the stones altogether, depriving children of an opportunity to enhance their understanding of the danger of stones or opportunities to engage in creative play with loose objects.

5.10.2 Timetabling of recess breaks

Jambor (2000) says that education policy makers are so obsessed with academic attainment that they have eliminated or drastically reduced other activities which are important in children's total growth, development and learning. Jambor's belief that curriculum is weighted too heavily towards cognitive development is supported by the comments of the three principals in this study. Each of the principals mentioned timetabling to include specialist teachers or other curriculum needs as influential in the scheduling of recess breaks. In other words, recess breaks were not given priority over classes which were focused on learning in the classroom. Each of the principals indicated the influence of “what most other schools are doing” as a significant factor also, each commenting that no schools have afternoon recess breaks anymore. An additional influence in School 1 described by the principal was the school culture and tradition which was too strong for him to change in relation to timetabling.

5.10.3 Teacher interest in the playground

In line with an Interpretivist approach, behaviours illustrate understandings and this was particularly useful when observing teachers on yard duty because their apparent reluctance to participate in the questionnaires resulted in little data from this source. By observing teachers on yard duty, it became apparent that they had not participated in the study eagerly because of a lack of interest in the playground. This was clearly
visible when observing them in the playground where they did not involve themselves in the children’s play and were only observed interacting with children when policing playground rules. As noted by Evans (1990) yard duty was something teachers could gladly do without.

The researcher initially anticipated that the level of response by teachers to the voluntary questionnaire would indicate the extent to which they were interested in the playground. This may have been a reasonable assumption as the researcher had to ask on several occasions for the teachers in School 1, who had shown interest in the questionnaire, to return them with only 6 out of 15 completing them. In School 2 the principal strongly encouraged teachers to participate and the researcher felt that some may not have done so if they had been less pressured; 11 out of 13 completed the questionnaire. In School 3 the principal also strongly encouraged teachers to participate and some teachers hurriedly filled out the questionnaires with only 13 out of 31 completing all sections. The responses of teachers to the questionnaires indicated that the value of recess for children was in the area of social development (See Table 2). Each of the principals also expressed this view during their interviews, describing the development of social skills as the main value of outdoor play in the playground.

From the responses given by teachers to the questionnaire and the observations of teachers on yard duty, it would appear that the playground is not a focus of their attention. This supports findings by Davies (1997) who suggested that teacher’s limited conceptions of their role outdoors may indicate a lack of familiarity with theoretical developments and associated research. This view is shared by Evans (1990) who recognized the undervaluing of play by adults as a critical factor to diminishing play in school playgrounds. In this study, there were only two examples of teachers participating in children’s play and these were recalled by children in the focus group interviews but were possibly not teachers currently on staff.

The benefits of recess breaks in school as described by Tomporowski and Ellis, (1988); Pellegrini, (1991) and Jambor, (1999) were not acknowledged by the teachers in this study. They mostly saw their role as supervising or policing when on yard duty and none enjoyed this role. Only three teachers in this study described outdoor play as important and only one teacher thought it was necessary for balanced development in children. Findings would suggest that, given the option, teachers in Australia, like those in Britain, would gladly hand over playground duty to ancillary staff. Given their lack of understanding of the importance of outdoor play, they may also support the
removal of it all together as is the case in some schools in the USA (Armitage 2001, Schudel 2001).

In this study teachers praised and valued Games with Rules in the playground but seemed unaware of the other types of play children engaged in just as frequently. This was interesting because it suggests that the very visible formal Games with Rules, which are also well supported by adults in our society as discussed earlier in this chapter, receive the same support in school playgrounds. While this is not a negative outcome, it can however, result in larger proportions of the playground being designated for this type of play and not for the other types of play, also beneficial to children. This was clearly evident in the three school playgrounds in this study where large areas of space were allocated for formal games such as basketball, netball, football, soccer and cricket. For those children who do not choose to participate in structured Games with Rules, their opportunities for play may not be equally well catered for in school playgrounds.

In fact, children who are interested in the investigation of the natural world through Scientific/sensory play may need to break playground rules in order to access natural materials. This was seen time and time again in the playgrounds of each of the schools in this study: children breaking playground rules for the opportunity to play in bushy areas, near and around trees, to touch flowers hanging over fences, the list goes on and on. For these children, the question emerges as to whether these schools are catering for their needs as fairly as they are catering for the needs of children who prefer to play Games with Rules. Is this a rights issue? The same questions can be asked with regard to Imaginary play and the fact that in this study, in each of the playgrounds, children risked breaking playground rules in order to find places to play Imaginatively, with opportunities for hiding and privacy not allowed in the rules of each of the playgrounds. Importantly, these children have equal rights with children who choose to play structured Games with Rules, even though adults might not applaud such play with the same enthusiasm they might a structured team game.

Teachers in this study indicated in the questionnaire responses that recess is important for social development. This belief was also described by each of the principals during their interviews. Interestingly, their understanding of the types of play which would facilitate the learning of social skills was limited. With a greater understanding of the social learning occurring during Imaginative play, teachers and principals may view the playground differently. Children engaged in such play may be
encouraged rather than interrupted and punished as was the case in the schools in this study. In this study, children presented evidence of how they respond when a supervising teacher acknowledges and responds to their Imaginative play, when in School 1 a child described his favourite teacher in the whole school as one who would ‘buy’ things from the ‘bakery shop’ created in the sandpit. This teacher openly showed that she valued this Imaginative play by participating in it and may have used the opportunity for scaffolding learning in a wide range of areas such as mathematical calculations related to purchasing products. Unfortunately this was one isolated case in this study.

The responses by each of the principals in this study about the importance of recess for burning off excess energy reinforces that their understanding of the importance of play during recess breaks is limited. Each of the principals talked about the motor skills developed during active play, also described by Bunker (1991) and each had allocated large areas of their school playground to spaces where Games with Rules such as cricket and football could be played. Principals also discussed the social skills which could be practiced during games, however, whether they also understood the social skill learned during informal Games with Rules, as described by Jambor (2000) and Flemmen (2005) was not evident.

With regard to Scientific/sensory play, none of the responses of principals or teachers made links with direct experiences of children in their environments, constructing understandings of their world as described by Davies (1997). Disappointingly, children were banned from playing in areas in each of the playgrounds where there were bushes, trees and gardens. They were also breaking rules if they played with sticks, dirt, water or stones. In fact, in each of the schools in this study, teachers and principals focused on keeping the playground tidy, with litter described as a major concern by each principal.

Interestingly in School 2, the principal described play in the playground as being essential for children and her concerns about children who chose not to play at all had prompted her to employ ancillary staff to teach children formal games during recess breaks. This practice indicated that for the principal and teachers in School 2, the most valuable type of play was formal Games with Rules. Effort was not being made towards facilitating any other type of play in this playground by providing playspaces which would encourage Imaginative play or Scientific/sensory play. For children living in high density housing in an inner city environment, places for privacy in the
playground may be desirable and equally important would be exposure to natural materials.

5.11 The role of teachers on yard duty and their impact on children’s play

Both Evans (1990) and Sluckin (1981) found that teachers, although acknowledging it as necessary, had a negative attitude towards playground supervision, often to the point of abhorring it with many teachers describing yard duty as stressful. The majority of teachers in this study saw their role in the playground as one of policing or supervising, implying a role as rule enforcer. Teachers described this as a negative aspect of yard duty. Most of the observed interactions between supervising teachers and children in the playground involved the breaking of rules by children. Few teachers described any positive aspects of yard duty, although a few described meeting children and catching up with children from previous classes they had taught as a positive experience.

In 1990, Evans’ Australian study of playground supervision found that teachers were unprepared for their role as playground supervisor, accounting for their varying styles of supervision. Fifteen years later, this study shows no evidence of change. Teachers in this study, have varying styles of supervision and were not prepared for what they would encounter in the playground, often interrupting play to blindly enforce rules. A number of examples of teachers intervening in Imaginative play in out of bounds areas were observed in this study. For children playing in a world created in their imagination, supervising teachers, in their policing role, would be viewed as invaders. Also examples of teachers stopping Rough and Tumble play with warnings about potential injury showed a lack of understanding of what was really happening in this play and that it was not related to fighting.

Thirty teachers responded to the questionnaire across the three schools and nine of these described their time in the playground on yard duty as stressful. Ten said that the constant unnecessary requests for help were annoying and eleven described unpleasant weather conditions as a negative aspect of their time in the playground. Under these conditions teachers’ focus is not on the importance of the play children
are engaging in but rather on the enforcement of playground rules and the stress of being on supervision. In this study there was no evidence of supervising teachers extending children’s activities through suggestions or questions, or participating with children to extend a play theme or conceptual understandings, or redirecting to exploit incidental learning as described by Hildebrand (1994).

A common perception of supervising teachers, indicated in the questionnaire responses, was that their role was that of mediator in disputes between children. During playground supervision teachers were not observed acting as mediators, helping children to learn to solve problems on their own as suggested by Jones and Reynolds (1992) but instead were policing.

Four teachers in School 3 described being a play leader as part of their role, however no children mentioned teachers in that role and no teachers were observed in that role in this school. Rather than assisting children to develop self-control and build self-esteem (Bredekamp, 1987) they were constantly enforcing the rules of the playground. During observations in each school, interactions between teachers and children involved reprimands for breaking playground rules. Scales (1987) recognized the value to the learning of social skills when children communicate with peers and adults during play. There were only two instances, from the three schools, recalled by children when they could remember an adult joining their play.

In this study teachers described very few positive aspects of playground duty for them, in fact many described it as stressful (See Table 5 Chapter 3). Under these circumstances, it is not surprising that teachers did not feel like playing with children during recess breaks but instead wanted the time to pass as quickly as possible.

In each of the schools there was a different structure for timetabling teachers on yard duty. In School 1 teachers spend four 50 minute blocks of time in the playground, whereas in School 3 they spend four 15 minute blocks. It isn’t surprising that only two teachers in School 1 named anything positive about yard duty compared with twelve examples of positive aspects described by teachers in School 3. Such long sessions of yard duty would be very challenging for teachers, particularly in unpleasant weather conditions which have been commonly described as a negative aspect of yard duty by teachers in this study. In School 2, teachers were on yard duty for 15 minute blocks, usually 5 blocks per week. These teachers described only two examples of positive aspects of yard duty. The playground in School 2 was crowded, noisy and barren with
asphalt surfaces, where as the playground in schools 1 and 3 were large and have trees, gardens and grassed areas. The physical environment may be an influence on teachers’ desire to spend time in the playground also.

As pointed out by Sutton-Smith (1981), playground supervision arrived initially to protect the school property and to protect the children. Perhaps this culture persists and may be why so many teachers in this study saw their role as policing. Evans (1990, 1995b) found that the supervising styles of teachers impacted on the play of children in the playground. The tendency for teachers to stand around watching children play, and only intervene when there was a safety hazard or when a child required some form of assistance, appears to be a particular feature of teachers’ interpretation of their role in outdoor settings in this study. In this study teachers described annoyance at constant requests for help which were perceived as unnecessary (See Table 6).

In Schools 2 and 3 teachers described fights among children as a negative aspect of yard duty. Evans’s (1990) Australian study of playground supervision found that most teachers did not intervene in any playground activity unless it was deemed essential to do so. During playground observations in this study, no fights were seen in any of the playgrounds.

A common complaint by teachers in this study was that yard duty took away from lesson preparation time, something they obviously considered more important. This may not be the case if teachers understood the learning that occurs in the playground. Yard duty should be equally valued with classroom teaching. With the current emphasis of the teacher’s role as a scaffold and supporter of learning (Vygotsky 1978, Bruner 1966), it is interesting that this practice is slow to be incorporated outdoors. It is possible that teachers do not have the energy to teach effectively in both the classroom and in the playground, without adequate recess breaks of their own.

In the three schools, there was surprisingly little interaction observed between supervising teachers and children. On those occasions when it was observed, it was for the purposes of reprimanding children for breaking rules. In School 1 children were told to put hats on and not to play in bushes or in the out of bounds areas. In School 3 children were also told to put hats on. By contrast in School 2, most of the reprimands
were related to how children were playing. In this small and crowded space, children were warned frequently to be careful not to hurt others.

In School 2 where there was little room for children to play, teachers were not observed restricting access to areas as was common in Schools 1 and 3. Most observed interactions between supervising teachers and children in the playground were initiated by the teacher. In School 1 on a number of occasions, children were instructed to leave the playground and go into the building to get their hats. They were also told not to play in out of bounds areas such as in bushes or the “banks” area. In School 3 a teacher stopped play in the sandpit when she saw a child throwing sand in the air. When he explained it was part of the game, she responded by warning that it was a dangerous thing to do. When she had left the playspace, the game resumed.

Given that Vygotsky (1978) pointed out that children are functioning at optimal capacity when they are playing, teachers who understood the possibilities associated with scaffolding learning in play could choose to do so whilst they are in the playground. This would have the potential to not only enhance children's learning but also strengthen the relationship between children and their teachers. This would not inhibit the free play of children because, as Vygotsky explained, children would use their new learning to enhance their play. Teachers would become play leaders rather than rule enforcers.

The focus of the principal in School 1 was to increase the number of teachers on yard duty and in School 3 the principal spoke of trying to have teachers covering the whole playground. Both principals believed that more supervising teachers would lead to less problems in the playground. This view was negated in the Adventure Playgrounds established in London in the 1950s and described by Bengtsson. In these playgrounds the ratio between adults and children was often one adult to 60 or more children. “The primary job of every worker is to assist the children in everything they do and help them form relationships with adults. They are friends and advisors to the children—not authoritarian leaders,” (Bengtsson, 1972). In none of the schools in this study was this approach taken by principals or teachers.

The notion of children in more stimulating playground environments having less behaviour problems as supported by Moore (1974), was not evident in the views expressed by the principals in this study. Moore found that children got into less trouble and teachers were more positive about yard duty when playground
environments were stimulating and aesthetically pleasing. In this study principals were concerned that playgrounds were tidy and free from litter, however they did not mention the possibility of aesthetically pleasing, stimulating playgrounds having a direct link with teacher attitudes to yard duty and children’s behaviour.

This was not a priority expressed by principals in this study whose concerns were based more on safety issues and fears of litigation. The ever increasing problem of playground bullying in Australian schools which sees it now on the Federal Government’s agenda raises questions in this area. The additional concerns about childhood obesity now of concern in Australia sees a Federal Government response advocating formal exercise classes. The value of free outdoor play and its inherent physicality is not considered.

5.12 Strengths and delimitations of the study

5.12.1 Strengths

The topic of the changing face of play in primary school playgrounds was timely and was of interest to the principals in the schools who participated in the study. With a great deal of research focus placed on curriculum and teaching approaches inside the school classroom in Australia, it was timely to look at the play and learning that is occurring outdoors and how this is valued and supported by schools.

The sample of three schools, ranging from inner city to middle suburbia and to a new growth area, was able to provide an overview of the different playground practices and policies, which enabled comparisons and contrasts to be made.

The use of a pilot study to develop the play categories for playground observations was a strength of this study because it allowed for trialing categories prior to commencement of the major study. It also allowed for trialing mapping of playspaces within a playground to find the most efficient model to use in the major study. The pilot study was also used to refine the scan-sampling method as used by Boulton (2005) to provide data in the context of this study and to practise using this method in a school
playground prior to starting the major study. During the pilot study the researcher was able to trial ways remaining inconspicuous in the playground.

An Interpretivist approach to data analysis enabled a rich picture of each school playground to emerge with the many perspectives of participants contributing. As expected, this range of perspectives contributed to the depth of understanding of the issues relating to the playground in each of the schools. A particular strength of this methodology was the playground observations which provided the opportunity to observe the behaviours of teachers and children in the playground of each of the schools. The five different methods of data collection (interviews with principal, questionnaire for teachers, group interview with focus group of children from grades 2/3, drawings by these children and playground observations) strengthened the validity of the findings and confirmed common elements. An interesting and complex picture of the school playgrounds has emerged from the descriptive data in this study. The perspectives of principals, teachers and children about the changes which have occurred in their playgrounds was sought and interpreted, in order to build a picture of influences on changes in playgrounds today in Australia. Influences at government level were considered alongside influences at local level in each of the schools. The thick descriptions in the study provide policy makers at government and local school level with enough detailed information to have the means of evaluating individual school playgrounds and the types of play that children are engaging in with the view to supporting this poorly recognized learning environment.

5.12.2 Delimitations

As discussed in the Methodology chapter of this study, the three schools purposively selected for the case were considered by the researcher to be, in some ways, a metaphor of Australian schools as a whole and it was considered that the essential features of the playgrounds in this study would be reproduced often, in the larger social unit of Australian primary school playgrounds. However, having said this it is essential to acknowledge that there will be primary schools in Australia where different findings would be reached because of the context of these schools and the additional and unique involvement of community. All primary schools in Australia are subject to the same equipment safety standards and this will influence what equipment is in every school playground in the country however, generalization was not the intention.
of the case study method used. The other common influence across Australian primary schools is the national curriculum and its influence on school policy, with a focus on literacy and numeracy standards in schools. A future study using a large sample would be more likely to give results which could be generalized for all Australian primary schools.

The sample of teachers who participated by completing a questionnaire only represented those with an interest in the playground or those who were free to attend the information session. This narrowed the views represented from within the sample group and again cannot be generalized for all teachers in Australian primary schools. A larger representation of the views of teachers would be advantageous to understanding their perspectives.

The children from each school who participated in the focus group interview and who provided drawings of their play, were chosen by their class teachers. Their inclusion was dependent on gaining written permission from parents/guardians and in School 2 where most families did not speak English, this narrowed the sample. The focus groups were chosen from the middle years of primary school so as not to be biased towards lower or upper primary years but of course, this is limiting. Again a larger student sample would be an advantage in understanding children’s views.

The large amount of area to be covered by the observer during each recess meant that each area was observed once during each recess break, therefore any other play which children engaged in following the set time in each area was not seen. This means that there was a lot of play going on in the playground which the observer did not see. It would also be valuable to observe the playground at another time of year such as winter to see if there is an increase in categories of play such as Chants and Rhymes or popular play.

A fundamental concern in this study is identifying associations, influences and causes in the playground with regard to play opportunities. Using a interpretivist approach means that an understanding of the influences and causes in each school was built from the data and then each of the schools was compared. Prior to the commencement of this study it was impossible to know whether schools would vary greatly, in other words, whether there would be some types of play which would not be found in each playground. As it turned out, the play observed in each playground was very similar, the exception being that no observations were made of Chants and
Rhymes in two of the schools. This meant that it was not an issue trying to identify what was influencing missing play categories but rather, what was influencing the play that was occurring. In each school these influences were determined from the data.

5.13 Concluding statement

In those primary schools in the USA where outdoor recess breaks have been eliminated or dramatically shortened, teachers and researchers are airing concerns about the negative impact on children’s well-being (Armitage 2001, Schudel 2001, Clements 2005). Simultaneously concern for increased levels of childhood obesity and unacceptable playground behaviours in school playgrounds in other developed nations such as Portugal (Neto, 2005), Austria (Popp, 2005) and Norway (Flemmen, 2005) is being expressed. Based on these same concerns, changes have been made in many Japanese pre-school playgrounds (Obana, 1989) and in many German primary school playgrounds (Schaffer, 2005), which have resulted in a change in thinking about the role of recess breaks and outdoor play in primary schools. Many groups around the world have formed to advocate the play rights of children, focusing on this as a human rights issue and fight for the retention of recess breaks in primary schools. In Australia there is a strong community focus on the safety of children with the principals in this study describing the out of school time of the children in their schools as either adult supervised at all times or indoors where it is perceived to be safer. This study shows clearly that fear of litigation has manifested in the removal of pieces of play equipment from the school playgrounds, often without legitimate safety concerns and prompted by one isolated incident. A strong influence on principals when altering their playgrounds, as they explained during interviews in this study, is the practices of colleagues in other schools. Principals were greatly influenced by changes other principals were making in their school playgrounds. With greater understanding of the importance of children’s play in the primary school playground, changes to playspaces and equipment could be made with genuine consultation and cooperation from all stakeholders. Rich play environments such as those described in Japan and Germany could be achieved and children’s well-being and learning would be enhanced.

School playgrounds are places of learning for life and they are where children learn skills in all areas of human development (Neto, 2005). This study clearly shows that children will improvise using what is available for them and that they will engage in a
wide range of types of play in playgrounds, however, the quality of playspaces could be economically enhanced with the provision of loose materials. In this study children had to break playground rules and risk the consequences of being caught doing so in order to play in areas with natural features such as bushes, gardens, sticks, stones, dirt and trees. To maximize rich learning in the primary school playground, playspaces need to be designed to offer rich affordances for play as described by Malone and Tranter (2003). The importance of including children in the playground design process and ongoing maintenance of their school grounds (Hart, 1992) should not be ignored because this is how appropriate playgrounds can be achieved in schools. By involving the wider community, this process will also address the context of each school and diversity of school communities (Schaffer, 2005). With the involvement of children in the creation and maintenance of their school playgrounds, they will reap the benefits described by Titman (1994) and Schaffer (2005) of increased self esteem and pride in their school environment, no longer feeling unvalued in their contribution as was seen in this study. It is important that children are genuinely involved and not as Hart (1992) warns, merely in a tokenistic way.

This study showed that the teachers and principals in the three schools in this study did not understand that the outdoor environment is an important learning place for children. The undervaluing of play by both teachers and principals in this study is a verification of Evans’ findings that this is a major reason why primary school playgrounds are becoming less appealing for both children and teachers in Australia (2001). A stronger emphasis on the academic value of play along with the more obvious physical and social and emotional benefits is important. The numerous examples of children engaged in Scientific/sensory play in each of the playgrounds in this study was evidence that this is a common way of learning scientific facts about their worlds by children of all age groups.

Teachers could be challenged to see their role in the playground differently, understanding their value as facilitators of play not just enforcers of rules, as they were in this study, through inservice programs, special conferences and preservice teacher courses which focus on these issues. This study also displayed a powerful communication network of principals which influenced decisions made about playgrounds and recess breaks in their schools. Examples of principals, during their interviews, commenting on what other schools were doing in their playgrounds are found in each interview. This study showed that principals share information about
their playgrounds and feel the pressure of keeping up with current practices in other schools.

Principals demonstrated their undervaluing of children’s play in their timetabling of recess breaks around curriculum blocks of time, the focus on the value of indoor classroom time overriding the benefits of outdoor play.

Allocation of playspaces in school playgrounds could be more evenly distributed in the schools in this study to facilitate more opportunities for rich Imaginative play and Scientific/sensory play in order to cater fairly for the play needs of all children in the playground. This study showed that the majority of space in the playground was designed to accommodate formal Games with Rules, a category of play approved of by adults and mostly engaged in by boys. Equally popular with children in this study was Imaginative play, however this was often conducted in out of bounds areas. To acknowledge and support the value of Imaginative play, playspaces which offer possibilities for children to hide and create imaginary worlds could be included. To provide opportunities for Scientific/sensory play, playspaces providing a rich and changing assortment of natural materials, such as large sand areas, places for digging, water play, gardens, animals, cubby holes, raw materials and construction materials, should be provided also.

The environmental features of the playground, both natural and human-made, have the potential to be used in various ways, influenced by the needs of the children. In this study, observations, interviews and drawings supported existing research about features loved by children - small places where children can hide are particularly valuable for Imaginative play and solitude (Kirkby 1984, Moore and Wong 1997, Stine 1997); Stine (1997) identified the value of perching places as did Hart(1979). Appleton(1996) also discussed the pleasure children have in places that offer the ability to see but not be seen. Playspaces designed cooperatively with children would be likely to include these features (Schaffer 2005).

The value and importance of loose objects in play as described by Nicholson (1971), Evans (1998) and Schaffer (2005) was not understood by principals or teachers in this study. No loose equipment was provided in any of the playspaces in any of the playgrounds, in any of the schools. In this study children frequently risked breaking playground rules in order to access such natural loose materials for their play as sticks.
flowers and leaves. The learning potential of play which involves loose natural objects was largely misunderstood and underestimated by the adults in this study.

Armitage (2001) found that children still managed to satisfy the basic developmental needs that their bodies unconsciously tell them they require, without the direct involvement of adults and in a play environment that can be unattractive, barren and seemingly devoid of play value. The findings of this study support this view. Children were observed engaging in all types of play despite the playspaces and equipment they were provided with. As pointed out by Hart (1979) children are adaptors and can use what is available to meet their needs. This study has shown the varying needs of individual children and their resilience in addressing these play needs despite restrictive playground rules, poor equipment choices and barren uninteresting playspaces. Rivkin (1995), Moore and Wong (1997), Malone and Tranter (2003) and Schaffer (2005) suggest that more interesting environmental features in playspaces would increase the intensity of play and the range of play behaviours and the learning opportunities for children. This study supports this belief also as children is Schools 1 and 3 where there were a range of natural features, utilized these in their play often but only if they were willing to break playground rules and venture into out of bounds areas. In this study, children who obeyed the playground rules were deprived of these natural playspaces as settings for their play.

Playground rules have become increasingly restrictive in order to avoid possible accidents, to the point where many Australian playgrounds ban running and ball games (Evans, 2003). Many of the rules enforced in the schools in this study seemed unnecessary and counterproductive, such as vigilant policing of the wearing of hats on cold, overcast days. Other rules showed a lack of understanding on the teachers’ part, such as stopping boys engaged in Rough and Tumble play, warning them that they will get hurt, in other words confusing this play with fighting. As mentioned earlier, children will always satisfy their play needs and schools have the opportunity to enhance children’s play experiences and subsequent learning by ensuring that teachers’ knowledge of the importance of outdoor play and recess breaks is increased. This study supported Evans’s (2001) finding that teachers mostly do not enjoy playground supervision and would rather not do it. Teachers in this study described negative aspects of supervision such as weather conditions, feeling like law enforcers, stressful engagement with children, but few listed any positive aspects and none were observed enjoying yard duty. With a greater understanding of the importance of
outdoor play for children's learning and an understanding of the scaffolding role they could take in this play, they may value supervision as worthwhile and important.

5.14 Recommendations

If the Australian government focused on and actively promoted children's learning in the outdoor environment of schools to the same degree as they focus on and promote children's learning in the classroom, important benefits to both children, teachers and communities would result. Some international governments such as Germany have described children as a sustainable investment for their country's future and have invested heavily in researching and implementing ways of facilitating optimal learning for children in both school and community contexts in the outdoor environment. Research has informed such governments that much of the learning that occurs in children's lives does not only happen in the school classroom but also in the outdoor environment of the school playground (Shaffer, 2005). The Australian government has focused on funding research into the learning of literacy and numeracy skills in classroom contexts and has invested heavily in these areas of research and curriculum development and the learning occurring in the primary school playgrounds has been largely ignored as a government research focus, apart from research into bullying in school playgrounds, which has become increasingly commonplace (http://www.dest.gov.au/sectors/research).

The literature informing this study suggests that with minimal funding and informed collaborative practices, all Australian primary school playgrounds could provide valuable outdoor play and learning opportunities for all children. Ironically, high quality natural outdoor playspaces are significantly less expensive than the widely accepted prefabricated fixed equipment visible in many Australian primary school playgrounds. Although the focus of developing playgrounds in such a way would empower children, it would have the benefit of also involving families and the local community, as has been found in Shaffer's work (Schaffer, 2005). Learning places can celebrate nature and civic life with children, families and community involved with professional support at all stages of planning, construction and maintenance of outdoor playspaces. When designed by children, families and community members, playspaces are sensitive to local context, resulting in a sense of ownership and belonging and naturally occurring features of each area can then be respected, with the plans flexible enough to evolve.
and develop as the needs of the community changes. Schaffer (2005) discussed playground environments as “ecological, pedagogical and economical” by using natural materials in preference to manufactured play equipment.

This study has shown clearly that in the three case study schools, children’s play choices were very similar. Despite the fact that each school was located in a different soci-economic part of Melbourne and was built in a different era of Australian education, we in Australia have the opportunity to realize this potential in all school environments. Local and natural resources can be used rather than more expensive prefabricated constructions often currently seen in playgrounds. Recently the Australian government focused on school playgrounds by providing small grants of $500.00 per school towards a school yard blitz. Although this was a one-off initiative it has the potential to be extended in light of research to maximize opportunities for learning in school grounds. While acknowledging that there are some cases of exciting areas and playspaces in Australian primary school playgrounds, this is by no means common place. Commitment to funding the implementation of outdoor school environments as exciting places of play and learning will enhance opportunities for all children in Australian schools.

Research funding could also be channeled into investigating how international governments are supporting their young children’s learning in the outdoor environment. As well as benefiting from an understanding of Germany’s focus on children as a sustainable resource and the UK’s focus on learning in the outdoors through Learning Through Landscapes project, there are also lessons to be learned from Japan’s and Norway’s recognition of the importance of risk taking during outdoor play. The role of adventure playgrounds for children’s exploration and creativity are still found in countries such as Germany, Denmark and England despite some community opposition to the ‘untidiness’ of these playspaces. In a few states in the USA, in Germany, Norway and in adventure playgrounds, natural loose parts such as sticks and stones and other raw materials are provided for children’s play. The AECI recommendation to provide inviting environments include water play, gardens and animals, a variety of raw materials as well as locating these environments near classrooms for a free flow of play and learning indoors and out. As found by Pellegrini and Blatchford (2000), high quality environments encourage play and learning and low quality environments inhibit play and learning. If Australia viewed children as our future in a global economy, government policy would insist on providing optimal learning environments for children wherever they are but especially in schools. If the Australian
government shows a commitment to children as a sustainable resource they will support research to explore ways of achieving rich outdoor environments in schools for all Australian children. Resources need to be channeled at both the national, state and local levels into maximizing opportunities for all Australian school children to learn in their outdoor environment. Australia is well known for its exciting and diverse land and natural features including its flora and fauna. Children who are given many opportunities in their formative years to explore natural materials will learn to love and respect the natural environment and become adults who value and protect this unique resource. Outdoor areas which have been designed, created and maintained by children, families and communities will not only be appealing learning places where nature is valued, they will also be a celebration of family and civic life.

Rather than the current focus on academic achievement in the indoor environment, a more balanced approach is needed which acknowledges the vital role of play and children’s learning and development in the outdoor environment. In the UK in the 1990’s the Learning Through Landscapes enabled schools to utilize their outdoor environments for learning of all kinds (LTL, 2006). Historically, educators in Australia have used the outdoor environment for physical education, gardening and for some teaching but the potential for a wider range of learning opportunities can be created in a natural outdoor environment which can become a rich resource for learning in both play situations. The experience in Germany of playspaces designed by local groups of children and adults could be modeled in Australia (Schaffer, 2005). Rather than seeing playgrounds which are generic with similar overall design, local landscape features, local cultural needs and local resources would result in no two playgrounds looking the same, each and every one would be appropriate to the context of the community.

It is well recognized within the indoor environment of the classroom that the quality of teacher interactions and the quality of materials do impact on learning. This same understanding should be transferred to the outdoor environment. This research disclosed that teachers were largely left out of decision making related to playground design, rules and timetabling of yard duty. In Australia we would benefit from teacher education and professional development programs giving greater emphasis to the importance of the quality of materials and teacher/student interactions for children’s learning and development in the outdoor environments. Teachers’ perceptions of their role as teachers on yard duty needs to change from that of policing to one of facilitating and supporting of children’s play and learning. As pointed out by Evans
(2001, 2005a) this could be addressed as a component of primary teacher education, not only in undergraduate courses but also in professional development offered to teachers in practice. This would not only benefit children but may also make the teachers’ time in the playground more enjoyable. Consideration of design and natural materials related to context if provided in the playground would greatly impact on the affordances for children’s play as described by Malone and Tranter (2003). The outdoor spaces need to be adaptable to many types of play experiences, driven by the children’s play choices. Children need playspaces where they can affect the changes in their natural environment with open ended experiences as described by Hart (1979).

The DEET guidelines for school playgrounds (DEET, 2005) are not prescriptive and principals in this study use their own networks for making decisions related to playground policy, equipment and materials. The current situation can lead to uninformed decisions which result in playspaces which offer fewer affordances for play and learning. Playgrounds and playspaces in Australian schools often look very similar but there are many more possibilities and all school playgrounds could be improved to provide opportunities to improve children’s learning through outdoor play. Principals need to be formally presented with current research about the role of the outdoor environment for play and learning to support them in decision making in relation to designing, constructing, maintaining and redesigning playgrounds as a valuable resource for education.

The focus of Schools 1 and 3 in this study to purchase expensive prefabricated play equipment for their playgrounds should be balanced by an understanding that there are more economical ways of providing playspaces with high affordances for play. Valuing the natural features of the playground and learning from the environment may prove more valuable and more economical for schools in the long term as it has in Germany (Schaffer, 2005). The desire to maintain playgrounds which are visually appealing to adults should be discouraged when this results in unappealing playspaces for children. Using the resources at hand, both environmental and human, will provide opportunities for learning about seasonal changes in local conditions. Contextualizing learning in such a way benefits children by celebrating the community they live in. A much more economical and pedagogically valuable approach could grow, with professional assistance, from within each community with all stakeholders working together at design, construction and ongoing maintenance of playspaces.
Segregation of playspaces on the basis of age groups because of concerns for children’s safety results in limiting possibilities for some younger children who have the physical skills to play on large equipment. The importance of modeled learning is also diminished when different age groups are not allowed to play together. Part of the learning process is allowing children the opportunity to assess their own capabilities and to challenge themselves to develop current skill levels. By enforcing such segregation, children’s learning is inhibited. The current focus on fear of litigation in Australian schools is proving detrimental to children’s opportunities for risk taking and learning in the playground and we can learn from the Japanese government’s realization of this damaging trend and their current focus on building playgrounds designed specifically to encourage risk taking.

Design of outdoor environments should be a priority in the original design of the schools. Historically in Australia, the buildings came first and when money permitted, playgrounds were developed. In early rural schools, playgrounds had to accommodate such features as horse enclosures as these were a requirement in that context (Cleverley and Lawrey, 1972). Current school playground design is often generic, as can be easily observed when passing primary schools, and gives the impression that all school communities are similar. This of course is untrue because Australian society encompasses huge diversity of environment and people which could be celebrated in playground design. By supporting school communities to design, build and maintain their school playgrounds these spaces will become celebrations of each school in a unique way. As new members join school communities, their contributions will add to the diversity of the playgrounds. This study shows that in new growth areas, as enrolments increase and more buildings are required as classrooms, playground space is encroached upon. This is a serious problem which illustrates the valuing of learning in the classroom over learning in the outdoor environment. It is an issue which should be addressed by government. It may be a more beneficial solution to increase the number of schools rather than the size of those currently in existence.

The re-establishment of current school playgrounds in Australia is an important direction for schools. Examples such as that of Moore and Wong’s (1997) reclaiming of an asphalt school playground and creation of an environmental space where children and community designed, created and maintained the area are well documented and the play of the children took on a more positive focus with teachers beginning to use this part of the playground for outdoor lessons. In Australia we can learn from such projects that by empowering the community, outdoor spaces can be created which
reflect the context of every school. The hidden curriculum of the school playground as described by Titman (1994) articulates the messages children receive about their own worth from the physical features of their school playground. Although there are isolated examples of exciting school playgrounds in Australia, this is not commonplace. The current situation sends a message to children that their school is very much the same as every other and does not celebrate individual diversity of communities.

Australian school curriculum should now focus on learning for life, acknowledging children as our most valuable sustainable resource and deserving of increased investment by government both in the areas of research and resources. Recognition of the school playground as a learning environment where children can learn skills in all areas of development: physical, social, emotional and cognitive, through their outdoor play, is vital for improved learning opportunities for all children in all Australian schools.

5.15 How this study has contributed to the picture

This study has given a detailed picture of the playgrounds of three primary schools in very different contexts in Melbourne. The play choices of the children in each school were categorized for the purpose of data collection and these categories could be used again by researchers in the primary school playground. One play category, Scientific/sensory play, has not previously been defined and provides a new lens for observing children's play in the primary school playground. The methodology also included use of scan-sampling observations of the playgrounds. Although this method had been used before by Boulton (2005), in this study, longer periods of observation were used in each playspace because additional information such as age groups of players and gender of players was sought. This method of scanning designated playspaces within each playground proved to be an efficient way of collecting data in a school playground and could inform futures studies seeking similar information.

The intrinsic nature of children's play has been showcased in this study exposing that children in each of the schools adapted what was available in the playground to meet their play needs. Further to that, this study showed clearly that, in the schools in this study, children were willing to break playground rules regularly in order to engage in the play they desired. This involved risking removal from play if caught, but children
had well developed warning systems in place to signal that supervising teachers were approaching.

Interestingly, each of the principals in this study was strongly influenced by what was happening in other school playgrounds. When asked about decisions to remove equipment or purchase new equipment, principals never quoted government guidelines or regulations, rather, they talked about what was happening in other schools. This was also evident when discussing issues around timetabling of recess breaks, when principals said they were influenced by what other principals were doing rather than understanding the need for recess breaks.

In each of the schools in this study, similarities in principals’ and teachers’ attitudes to the playground were clearly evident. Common to each school was the lack of respect for children’s ideas about their playground and children were not involved in any significant decisions about the playground. The design, construction and maintenance of playgrounds can be done by children and adults in an economical and environmentally friendly way, building a sense of community ownership and celebrating the diversity of each school but this was not understood by the principals and teachers in this study.

Importantly this study has shown that there was in fact an undervaluing of play by adults in the schools involved. It is possible that this is widespread in Australian primary schools as suggested by Evans (2003). Teachers and principals in this study were completely unaware of the range of important learning taking place in their school playgrounds. Consequently they were not prioritizing this learning environment in the same way as classrooms. In other words, equivalent money was not allocated to support learning in the outdoor environment as it was to promote learning in the classroom. It was distressing to see children engaged in play which was promoting development of skills for life and to then see them reprimanded by teachers whose interpretation of the play was completely uninformed. It was also sad to see children’s play interrupted for the enforcement of unimportant and irrelevant playground rules such as wearing hats on cold overcast days. However, the most disturbing reality uncovered in this study was the damage being done to the relationship between children and teachers in the playground. With more understanding of children’s play, teachers would see the importance of participating in and encouraging this play. They would know the importance of allowing children to play in bushy areas where they could hide and have privacy, and to climb trees. They would give children a respected
role in the planning, creation and maintenance of outdoor playspaces, not only valuing their contribution but also building links with community. Most importantly, teachers who understood the many types of children’s play and the intrinsic nature of all play, and the diversity of learning which occurs during play, would be more effective teachers.

5.16 Future directions for research needed in this area

Given the small amount of research which has been conducted in Australian primary school playgrounds, there is an urgent need for further related research. Of particular interest would be a national survey of school recess breaks in schools, similar to the one collated by in the UK by Blatchford and Sumpner (1998). This would identify the amount of time schools allocate for recess breaks, factors influencing recess breaks and would provide opportunities for comparisons. Such a survey would provide data which is currently lacking.

Another exciting and informative action research study would be to observe children’s play in the primary school playground before and after change to playspaces and equipment. A study like this could increase understandings about the physical features of playspaces which impact on play choices and to what extent they offer affordances for play as investigated by Malone and Tranter (2003). To research collaboratively with experts in the field of design would add a valuable dimension to such a study.

A longitudinal study of the play of individual children in the playground, through the primary school years would give a rich picture showing how children’s play changes through the years. Such a study would help to clarify the ways children move between types of play during their primary school years. Currently there is no knowledge of the types of play individual children engage in during their primary school years and whether these types of play change throughout the years.

Research similar to that conducted by Kinoshita (1994) in Japan which explored the history of play in a particular area of suburbia over four generations, particularly excites my interest also because it clearly illustrates how play opportunities change in the same place because of changes to the environment. A similar study of the
Evolution of play in a particular school playground over a similar time span would be extremely interesting and would reveal how changes over that time, to the school environment have impacted on the play of the children.

Research by pre-service teachers about children’s play in the playground would also improve the understanding of the value of outdoor play during recess breaks, for children’s learning and may impact on their future practice as teachers. Pre-service teacher education including a focus on issues related to learning in the school playground and teacher supervision of the playground would result in teachers who are better prepared for this aspect of their teaching practice.
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APPENDIX

Appendix 1: RMIT ethics approval
Appendix 2: Department of Education and Training permission
Appendix 3: Consent form for school principals
Appendix 4: Consent form for parents
**Appendix 5:** Questions for small group interview with focus group of children
Appendix 6: Interview questions for principals
Appendix 7: Staff questionnaire
Appendix 8: Observation schedule