An exploration of kindergarten children's multiliterate practices in their homes

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AN EXPLORATION OF KINDERGARTEN CHILDREN'S MULTILITERATE PRACTICES IN THEIR HOMES

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Certification

I, Margaret Turner, declare that this thesis, submitted in partial fulfilment for the award of Doctor of Education, in the Faculty of Education, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Signed:

Margaret Turner
Date:

Dedication

This thesis is dedicated to future generations of young literacy learners, their families and their teachers.

Acknowledgements

This thesis has been a long journey that has impacted not only on my own life but also on the lives of others who have travelled the journey with me. I would like to acknowledge the support of the following people.

To my long-suffering and loving family who believed in me when I didn't believe in myself; my husband Stuart and adult children Simon, Natasha and Ryan. Thankyou! Sanity will, hopefully, return to our future journey together.

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This thesis has now been written, that journey has come to a close; the journey of learning, though, will continue in my own life and in the lives of all who have travelled with me. However, as some of our paths will now take different directions, thankyou for travelling with me thus far, for each of you has supported me when I stumbled, picked me up when I fell down and offered encouragement when it was needed.

Abstract

Children who enter kindergarten bring to the school environment, a wide range of abilities in literacy. Prior literacy experiences in the home and the wider community have been shown to contribute towards these wide ranging abilities and, consequently, future success in literacy at school.

Our society today, though, is changing rapidly. Our task, therefore, as educators is to prepare our children to function in a future civilization created by the biggest leap in technology since the Industrial Revolution two centuries ago. We have entered a time when advances in technology are having an important effect on literacy development. The literacy needs and demands of a changing society must be addressed in school when children are very young.

This inquiry was an exploration at three Sydney metropolitan schools of kindergarten children's multiliterate practices in their homes. The inquiry endeavoured to establish the relationship between these practices and the socioeconomic backgrounds and gender of these children. It also endeavoured to establish the relationship between the kindergarten children's practices and skills with the expectations of policy and curriculum documents in the first year at school of the New South Wales (NSW) Department of Education and Training (DET).

The following research questions guided this inquiry:

- *What are the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools?*
    - *What is the relationship between these multiliterate practices and socioeconomic background?*
    - *What is the relationship between these multiliterate practices and gender?*

- *How do the multiliterate practices and skills of these kindergarten children relate to the expectations, in the first year at school, of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET)?*

The inquiry was qualitative in nature and employed mixed methodologies of ethnographic techniques, case study and narrative inquiry.

There were three phases in this inquiry; the initial phase that involved surveying 123 kindergarten parents in three schools; the immersion phase that involved observing five case study children in their homes as they engaged in a range of literacy practices including print and paper-based literacies and techno-literacies, and the analysis of the NSW DET documents relevant to literacy learning in the first year at school.

It was found that while socioeconomic background and gender differences existed, all kindergarten children experienced a wide range of multiliterate practices in their homes that comprised print and paper-based literacies and techno-literacies. It was also found that parents held different views about the role that techno-literacies played in learning to read and write and these views seemed to mirror those of early years teachers, namely that print and paper-based skills were more highly valued for young emergent readers and writers.

It was also found that assessment of kindergarten children on entry to school did not recognise young children's techno-literacy skills in their out-of-school worlds and while curriculum documents included an extensive range of techno-literacy experiences and expectations of learning by the end of the first year at school, schools needed to do more in providing teaching and learning programs that valued young children's multiliterate experiences.

Glossary

This glossary includes the terms that are used in this inquiry.

CVC words

CVC means consonant – vowel - consonant. Words containing a consonant, then a vowel and then another consonant are the easiest words for the emergent reader to decode eg. mum, dad, big, dog, cat, not, fun.

Decode

Sounding out the letters, either one by one, as double sounds, or as chunks of letters, to read unknown words.

Emergent literacy

The term 'emergent literacy' has a narrow but important focus. This inquiry adopts views by Teale and Sulzby (1986) and Whitehurst and Lonigan (1998). Teale and Sulzby (1986,pxx) argue that,

> We use *emergent* to suggest that development is taking place, and that there is something new emerging in the child that had not "been" there before. Growth in writing and reading comes from within the child and as a result of environmental stimulation.

Whitehurst and Lonigan (1998, p848) further argue that emergent literacy is used to:

> Denote the idea that the acquisition of literacy is conceptualised as a developmental continuum, with its origins early in the life of a child, rather than an all or none phenomenon that begins when children start school. This conceptualisation departs from other perspectives on reading acquisition in suggesting that there is no clear demarcation between reading and pre-reading.

This perspective embraces literacy behaviours in the preschool period as legitimate aspects of literacy. Whitehurst and Lonigan (1998) further argue that an emergent literacy approach involves understanding that reading, writing and oral language develop concurrently and interdependently as a result of children's exposure to

interactions in social contexts in which literacy is a component, and in the absence of formal instruction (McLachlin 2007).

Grapheme

The smallest unit of writing. A letter or combination of letters that corresponds to or represents phonemes, eg. the *'f'* in *frog*, the '*ph'* in *phone,* the '*gh*' in *cough.*

Graphological information

Visual information about words and texts in print, eg. punctuation, letter sequences.

Grammatical/syntactical information

Information about language structure in comprehending a text, eg. sentence structure, text organisation and word order.

High-frequency words

Words that occur often when reading. They may include words easily sounded out and sight words. They are often related to general knowledge/experience.

Home readers

In the large majority of primary schools in New South Wales, students in Kindergarten to Year 2 classes take home 'home readers' on either a weekly or nightly basis. Home readers are levelled texts (see levelled texts in glossary) that are given to students to take home to practise reading at home to family and friends. The home readers are then taken back to school to be read to the teacher or parent helpers. The children move up a level of reader when they display an appropriate accuracy rate and understanding of the text at the given level.

Kindergarten

Means the first year of schooling in a primary school and does not relate to preschool.

Letter-sound relationship

The association between a sound in English and a letter/letter pattern in words. This assists in word recognition when reading.

Levelled texts

Throughout Kindergarten to Year 2 classes in primary schools in New South Wales (and for specific students in classes beyond Year 2 if they are not reading independently), texts for home reading are levelled from Level 1-30 (PM Benchmark Kit 1999, Appendix J). Level 1 is the beginning level and Level 30 is considered to be at an independent reading level. These texts are organised in classrooms in book boxes labelled with the text level. In recent years, many texts have already been levelled, at the appropriate level, by the book companies while other texts need to be levelled by teachers after they have been purchased.

Literacy

Encompasses talking, listening, reading and writing.

Multiliteracies

The term multiliteracies includes electronic literacies, techno-literacies, digital literacies, visual literacies and print and paper-based literacies.

Onset/rime

The separate sounds in a word, ie. the beginning part of the word (onset) and the rest of the word (rime), eg. *b-ark.*

Print and paper-based literacy materials

These include:

- all books;
- letters/postcards;
- magazines;
- newspapers;
- comics;
- TV programs;
- advertisements;
- instructions for games and building equipment; and,
- signs in the community.

Parent

Also includes primary caregiver.

Prior literacy experiences

Includes all literacy experiences prior to entry into Kindergarten, and encompass activities in the home, at child-minding centres or pre-school, and in the wider community eg. outings to parks, libraries, church or Sunday school, the beach or pool, restaurants, birthday parties and/or any family activity or activity with friends.

Phoneme

The smallest unit of sound.

Phonemic/phonological awareness

The ability to attend to and segment the sound stream into 'chunks' of sound, eg. phonemes, syllables, onset/rime.

Reading

Shared reading – occurs when the teacher or proficient reader reads aloud to a group or whole class. Students may be grouped so that they can see the text and the teacher can model reading strategies, read for enjoyment, or highlight particular features of a text.

Guided reading – occurs when a student reads a text at between 90% and 95% accuracy with teacher guidance to develop reading strategies.

Independent reading – occurs when a student reads a text with 95% or more accuracy without assistance.

Semantic information

The understanding developed and drawn from when comprehending a text, eg. recognising word sets (antonyms, words related to topic), predicting and following the topic of the text, following groups of words in a logical sequence, looking at layout and features.

Sight word

In the early years at school 'sight words' are those words that cannot be easily sounded out eg. school, home, little, friend, teacher. Children need to learn to read these words automatically by 'sight' and without sounding out the letters. They are common words that need to be memorised to enable reading success.

Syllable

A unit of sound within a word, eg. *won-der-ful.*

Techno-literacy materials

These include:

- TV;
- DVD/videos;
- CDs/tapes;
- talking books on CD or tape;
- computers
- computer programs;
- internet;
- email;
- multimedia CD-ROMs;
- digital camera;
- video camera;
- portable game machines eg. Gameboy;
- TV game machines eg. Sony PlayStation, Microsoft XBox;
- PDA (personal digital assistant);
- MP3 players (music players); and,
- communication equipment (mobile and home phones).

Text

Any written, spoken, nonverbal, visual or auditory communication involving language. It will include picture books, novels, conversation, plays, computer graphics and advertisements.

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Purpose of the Inquiry

Today, children's literacy experiences in the home are much broader than paper-based literacy materials, and include what Snyder (2002) calls 'techno-literacies'. The term, 'multiliteracies', therefore, includes both techno-literacies and print and paper-based literacies.

The purpose of this inquiry is to explore the multiliterate practices of kindergarten children in their homes, and to situate these practices and skills within the expectations of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET). In so doing, this inquiry also explores the role that socioeconomic background and gender issues play in early literacy development. Thus, the inquiry is guided by a sociocultural view of literacy.

There are three phases in this inquiry: the initial phase that involves surveying parents in three schools; the immersion phase that involves observing case study children in their homes as they engage in a range of literacy practices including print and paper-based literacies and techno-literacies; and, the mapping phase that involves analysis of the NSW DET documents relevant to literacy learning in the first year at school.

Statement of the Problem

All learning in schools is dependent upon children's skills in literacy. However, despite the plethora of rigorous evidence-based research and the billions of dollars spent annually on education (state budget of $11.8 billion 2008/2009 [NSW DET 2008a]) children in our schools continue to show different levels of achievement in literacy. This then ultimately affects employability, having major ramifications on individuals, and on the country as a whole. As stated in the *National Inquiry into the Teaching of Literacy*,

> The global economic, technological and social changes underway, requiring responses from an increasingly skilled workforce, make evidence-based high-quality schooling an imperative. Nowhere is this more important than in the teaching of reading (a key element of literacy) since reading competence is foundational, not only for schoolbased learning, but also for children's behavioural and psychosocial wellbeing, further education and training, occupational success, productive and fulfilling participation in social and economic activity, as well as for the nation's social and economic future.
>
> (Australian Government DEST 2005, p11)

Literacy learning is a national problem; one that affects us all.

It is this problem of children's different levels of literacy achievement in schools, why these different levels exist on entry to school and why this difference persists throughout a child's schooling, that has shaped this inquiry about the multiliterate practices of kindergarten children in their homes.

This inquiry, therefore, aims to explore early literacy learning in the home and add to our understanding of the relationship between early literacy learning, socioeconomic background and gender. It also explores multiliterate practices of young children in the home in order to inform parents, teachers of young children and future policy and curriculum directions for schools.

Specifically, the following research questions guide this inquiry:

- What are the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools?
    - What is the relationship between these multiliterate practices and socioeconomic background?
    - What is the relationship between these multiliterate practices and gender?

- How do the multiliterate practices and skills of these kindergarten children relate to the expectations, in the first year at school, of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET)?

Background of the Inquiry

Reading and writing – both of these words, but especially 'reading' – invoke emotive responses from parents, educators and the wider community. Many discussions and media articles focus on how reading should be taught. '*The Great Debate'* (Adams 1990) that has at times raged in The United States since 1959 is testament to the disagreement that still exists between the advocates of the teaching of '*phonics'* as the only way to teach reading, and those who advocate a '*whole-language'* approach to the teaching of reading. Australia has not been immune from similar debates.

In contrast to the ongoing argument, there is a plethora of research in relation to how reading is best taught, activities in the home that best prepare children for reading at school and the emergent skills that children need to succeed in literacy at school. The recent *National Inquiry into the Teaching of Literacy* quite explicitly states,

> Findings from the research evidence indicate that all students learn best when teachers adopt an integrated approach to reading that explicitly teaches phonemic awareness, phonics, fluency, vocabulary knowledge and comprehension. This approach, coupled with effective support from the child's home, is critical to success.
>
> (Australian Government DEST 2005, p11)

Legislators, educators and community stakeholders often proclaim that parents are a child's first and most important teacher. This is said as a rallying cry for parental involvement in children's education. Literacy is widely recognised as a lifelong process that begins in early infancy and continues throughout life, and family support has been identified as a critical factor in acquiring necessary literacy skills for successful school achievement. As Hannon (1995, p104) claims,

> The family's literacy values and practices will shape the course of the child's literacy development in terms of the opportunities, recognition, interaction and models available to them.

In schools today, the government spends millions of dollars on intervention and support programs, in reading and writing, at the school level. One of these programs *Reading Recovery*, a support program for Year 1 students at risk of failing in literacy, cost the NSW Government $25 million in 2002 (Devine 2003). However, this

intervention and support often comes too late and as Professor James Heckman, Nobel Laureate in Economic Sciences (2004) argues, “even by school age it may be too late to intervene to influence a child’s learning and motivation if bad learning habits are already entrenched” (Rudd & Macklin 2007, p4).

The dominant role of the home environment in developing emergent literacy skills in pre-school children is firmly established (Hannon 1995; Kruger & Mahon 1990; Rutter, Tizard & Witmore 1970; Teale & Sulzby 1986; Thompson 1985). Recent research has also identified emergent literacy skills that affect achievement in reading at school (Lonigan, Burgess & Anthony 2000; Morris, Bloodgood & Perney 2003; Pullen & Justice 2003; Stuart 1995; Whitehurst & Lonigan 1998).

Many studies have investigated the relationship between literacy activities in the homes of low socioeconomic schools (SES)[1] and school success. Snow et al. (1991) have identified, though, that there is a great variation in home literacy experiences within low-income households. Also, weak correlations have been found by White (1982) between children’s success in literacy at school and parent occupation, income and education. More recent studies have focused on a ‘*deficit view’* of children’s prior literacy learning in the home of low SES families and have claimed that socioeconomic background has minimal effect on children’s success in literacy learning at school when teachers *value* children’s prior learning in the home and *‘build bridges’* between learning at home and learning at school (Bourdieu 1991; Comber 1997; Comber & Kamler 2004; Dyson 1993, 2002; McNaughton 2002; Moll 1992;, Nistler & Maiers 2000; Wells 2006).

Heath (1983) found in her studies of three very different communities in the Piedmont Carolinas, that there was considerable cultural variation in the acquisition of oral language and the *manner* in which parents introduced children to literacy. The *culture of the home environment* directly affected the children’s performances in literacy at school. Heath (1983), and Teale (1984) both conclude that both cultural and social structural factors affect preschool children’s orientation to literacy.

[1] ‘SES’ is commonly an abbreviation for ‘Socioeconomic Status’; however, throughout this thesis the intended meaning of the acronym is ‘Socioeconomic Schools’.

There are also many studies in relation to the role that gender plays in young children's understanding of appropriate behaviours. Alloway (1995) states that children learn these gender-appropriate behaviours in the very early years.

> It is in the early years that girls and boys begin to learn about gender appropriate ways of behaving and relating, academic areas of interest and achievements, contextually determined relations of power, and patterns of desire
>
> (Alloway 1995, p21).

This view is also supported by Berk (1997, p520) who states that "gender-appropriate behaviours begin so early in the preschool years that modelling and reinforcement must account for its initial appearance".

Other studies have researched the role that gender plays in early literacy learning (Alloway 1995; Cairney & Ruge 1997; Freebody, Ludwig & Gunn 1997; Makin 2005; Nichols 2002; Razey 2002), and in his studies with teenage boys, Martino (1994) reported that teenage boys viewed reading as a '*feminine*' activity and English as a '*soft*' subject. This gender difference can also be seen in subject choices of Year 7 students (Teese et al.1995).

Several other researchers have studied the role of gender within family discourse (Nichols 2002), oral language interactions at both home and school (Makin 2005) and in early literacy development (Razey 2002). Findings from these studies conclude that differences emerge in literacy learning depending on the child's gender.

Today, children's literacy experiences in the home are much broader than paper-based literacy materials, and include what Snyder (2002) calls '*techno-literacies'*. Downes (2002, p194) suggests that "children as young as three can use computer technology to be creative and represent their ideas in symbols, words, sounds and images". Other research suggests that there are benefits in using technology as a tool in literacy instruction. Technology appears to motivate children and to increase the time they are willing to spend practising important academic skills. Daiute (1983), and Morrow, Barnhart, and Rooyakkers (2002) found that students exhibited a higher level of motivational engagement when using technological tools.

Technology has changed not only the world of adults, but also the world of young children. Learning and communication have also been dramatically changed in the process. Now, for the first time in history, the written, oral and audiovisual modalities of communication are multimodal hypertext systems made accessible via the Internet and the World Wide Web (Snyder 2001a). “Children now live in an ever-changing computerised world, where text, pictures, and voice combine to offer fascinating, new learning opportunities” (Casey 2000a, p43).

In an electronically mediated world being literate also means understanding how the different modalities combine in complex ways to create meaning. People have to learn to make sense of the iconic systems evident in computer displays – with all the combinations of signs, symbols, pictures, words and sounds. Literacy is no longer viewed as simply grammar, lexicon and semantics; literacy now comprises a wider range of semiotic systems that cut across reading, writing, viewing and speaking (Cloonan 2005; Snyder 2001b; Street 2001).

,

Therefore, it is important that studies explore children’s techno-literacy practices (Snyder 2001a) in the home, and include the print and paper-based literacy skills, and the technological skills that children bring with them to the school environment. Wepner, Valmont and Thurlow (2000) state that the responsibility of education is to prepare students for the future. Thus, in schools we need to teach our students to use technology if we want them to succeed in today’s world. To this end, it is vital that educators have knowledge and an understanding of the techno-literate practices and skills of young children and build upon these in the classroom setting (Beavis 2002). In the current education context, technology can support and enhance the development of reading, writing and the language arts, which are the foundations for success in school and in life (Reinking 1999).

Despite the extensive research in both paper-based and techno-literacies, “definitions of literacy, particularly as they are enacted in curriculum and assessment policies and in schools, for the most part remain largely print-based” (Beavis 2002, p47). With most curriculum documents in NSW schools having been developed around 1997, school teaching and learning programs are based upon the guidelines in these documents. Techno-literacies are included to some degree in the teaching syllabuses, however, guidelines for entry to school assessments make no mention of these. Schools, therefore, rarely assess children’s techno-literacies on entry to

school. As argued by Kitalong (2002, p85), “the early literacy of the students we teach remains a mystery”.

Why is this Study Significant?

This study is significant because success in reading and writing at school impacts upon a child’s success in every other subject at school, and a child’s success at school impacts upon his/her opportunities later in life.

> [T]he research reveals that the returns are highest from the early years of schooling when children are first learning to read … Without the ability to read, excellence in high school and beyond is unattainable.
>
> (Commission on Reading, National Academy of Education 1985, cited in Adams 1990, p27).

More recently, as cited in Rudd and Macklin (2007, p4), Heckman concludes that “learning starts before formal education begins, and sets the foundation for success or failure at school and life beyond”. And also cited in the same article, the UNESCO Global Monitoring Report Team (2006) claims that “… political commitment at the highest level must expressly recognise that early childhood care and education is an economic and social priority” (Rudd & Macklin 2007, p10).

Despite all of the above claims and government funding provided at the pre-school level, there appears to be little support for *‘at risk’* kindergarten children in the NSW public school system.

Through integration funding, support is available for children transitioning to kindergarten who have been identified as having high support needs at pre-school. However, there are no state-wide assessments of, or support for, kindergarten children who struggle with early literacy in that important first year at school. The *Best Start: Kindergarten assessment*[2] (NSW DET 2007) being implemented across schools from 2008-2010 is the first state-wide assessment tool for kindergarten students on entry to school. While these assessments will identify students’ abilities

[2] The NSW DET often use sentence case for their publication titles. However, for formatting consistency in this document, document titles are presented in title case and subheadings in sentence case.

in early literacy tasks, currently no funding has been made available for any support of *'at risk'* students.

Support is provided in Year 1 at some schools for a handful of students through the *Reading Recovery* program. Support is also provided in some schools through extra staffing of Support Teachers Learning Assistance (STLA) for students beyond Year 3 who perform in the lowest bands in state-wide *Basic Skills Tests* in Years 3 or 5. Also in 2007, under the DEEWR's *Even Start Program,* parents and caregivers of Year 3 students who did not meet the Year 3 national benchmark for reading in the Basic Skills Tests in 2006 received $700 worth of reading tuition for their children.. This program cost the Australian Government $20.6 million (DEEWR n.d.).

As a kindergarten teacher for much of my teaching career and now as a principal of a primary school, these issues have strong personal significance for me.

My Personal Story and its Significance in the Conceptualisation of this Inquiry

I have been intrigued about early literacy learning for most of my teaching career. In reflecting on my teaching, I realise that this intrigue became a quest for knowledge at about the time I became an executive teacher responsible for teaching and learning across Kindergarten, Years 1 and 2. My responsibilities included staff professional development, the teachers' teaching and learning programs and the purchase and organisation of resources.

My early years of teaching were mainly in Year 1 and 2 classrooms. This experience was enormously enjoyable and rewarding. The children were so enthusiastic, so interested in all school activities and so keen to learn. As they had already completed one or two years at school, the large majority of children who came to my classroom were already beginning readers and writers. They understood what Clay (1979) termed 'concepts of print'. They could also decode words. They were 'readers as code breakers'. They also constructed meaning from written text by using the four cues of semantic, grammatical, phonological and graphological information (NSW DSE 1997b, p9-13). In an atmosphere of support and encouragement they were confident to 'have a go', they were not afraid of making mistakes and their learning flourished. As this was during the 1970s, these children had adopted these strategies

prior to the above document's existence. Looking back, my knowledge of what we now term the dimensions and elements of 'Quality Teaching' (NSW DET 2003) were unknown and I often wonder how the children learnt as well as they did.

These were also the years prior to home reading programs, parent information sessions and classrooms that had abundant supplies of quality texts. During these years, I would bring my own supply of books from the local library to share with the children in my classrooms. It was their delight in these books, not a knowledge of the research of the benefits of storybook reading that encouraged me to continue this practice.

I then had some years away from the classroom raising our three children. This experience gave me a broader understanding of child development prior to school age. It was during these years that I became interested and involved in the 'Playgroup Movement' that was starting up in many areas. I started to read extensively about learning and development in the early years, and subsequently formed seven sessions on five different days at our playgroup. Each one of them was structured on the same model and when each group reached fifteen children and became independent, I would start up another session. As pre-schools were only in their infancy, playgroups were very popular and there was always a waiting list of parents wanting to join.

When our last child started school, I returned to teaching and began the path of promotion. It was also in these years that I extensively taught kindergarten classes. This was a different experience from my previous years of teaching Years 1 and 2. My learning from experiences rearing our three children and from my years in playgroup became very valuable.

I began to marvel at the enormous amount of learning children exhibit during that first year at school. For me, teaching these young children to read and write was incredibly satisfying because I believed that children's success at school and in later life was so dependent upon learning to read and write in that very first year at school.

Self-reflections of my teaching, and the kindergarten children's learning over the next couple of years, were the catalyst for this inquiry. Each year, not every child learned to read and write. For me, teaching less than one hundred per cent of these young

children to read and write was not good enough. My reflections included many questions but the few listed below were the most important ones:

- Do some of the children come to school with a head start?
- Why do some children learn to read and write while others do not?
- What are the most effective strategies for teaching children to read and write?
- Is learning to read and write the same for the boys as it is for the girls?

These questions helped to shape this inquiry.

During that period, I became an unofficial researcher, an ethnographer of a kind, gathering data on children's learning, and reading literature about early reading and writing. I discovered much information but my three questions above were still not answered.

I had the opportunity around this time to attend a conference where I heard Professor Trevor Cairney speak about the important role of parental involvement in young children's literacy learning. This was one of those moments that are always remembered. I was so inspired by Professor Cairney's research that I purchased one of his programs for assisting parents at home with their children's literacy learning; Talk To A Literacy Learner (Cairney & Munsie 1992c). And, in the following year, I was so convinced about the importance of this program that I offered it to parents. It was so successful at our school that I ran the program for the following five years. I was teaching at the time in a school of 190 students. At my time of leaving the school, 75% of parents at the school had attended TTALL. Some parents had attended twice. They commented that the course had helped them so much with their older child, that they had come back for a refresher course now that their younger child had commenced school.

Professional learning at the school level, and discussions with the principal at a previous school, who had recently completed his doctoral studies, encouraged me to enrol at university to complete a Master of Education, specialising in early literacy learning. That was ten years ago. It has been a long journey of learning, however, this inquiry has been a part of my life for so long now that I feel like it is a part of who I am. The inquiry's existence and mine run parallel. This quote by Halcolm, as cited in Patton (2002, p5) is very relevant for me:

> Newton and the apple. Freud and anxiety. Jung and dreams. Piaget and his children. Darwin and Galapagos tortoises. Marx and England's factories. Whyte and street corners. What are you obsessed with?

Obsession or not, now, as the principal of a very busy school of almost four hundred students, my path of learning has better equipped me to professionally develop staff, to make wise decisions about the literacy programs implemented at our school and to analyse our practices to ensure continuous improvement.

In preparing for this inquiry, I have found that a large body of research has established that literacy experiences prior to school boost reading achievement for most students (Hewison & Tizard 1980; Mason 1992; Purcell-Gates & Dahl 1991; Rutter, Tizard & Witmore 1970; Thompson 1985; Wells 1986). Other studies have identified emergent literacy skills needed for success in literacy at school (Lonigan, Burgess & Anthony 2000; Morris, Bloodgood & Perney 2003; Pullen & Justice 2003; Stuart 1995; Whitehurst & Lonigan 1998). Many studies have also identified activities related to storybook reading that enhance children's emergent skills in literacy (Bus, van Ijzendoorn & Pelligrini 1995; Senechal et al.1998).

Further to these studies about early print and paper-based literacy learning, in their out-of-school lives, even in the earliest years, children's experiences and expectations of literacy are no longer only paper-based (Labbo 1999, 2000; Labbo & Kuhn 2000; Luke 1999; Sefton-Green 2001; Turbill & Murray 2006) and language is not the only important communication system. Today images, symbols, graphs, diagrams, artefacts and many other visual symbols are particularly significant. Thus, the idea of '*visual literacy'* would seem to be an important one (Gee 2003). As Sefton-Green (2001, p174) observes, "teachers need to recognise that their roles and authority have changed, and that entry into and use of literacies is a pluralistic, complex, uncontrollable part of everyday life".

Having a better understanding of young children's multiliteracies at home in the early years is significant for all stakeholders – parents, teachers of young children and educators responsible for future policy and curriculum directions.

My reading and reflections have convinced me that literacy is a sociocultural practice and it is through this lens that I find I now view the teaching and learning of literacy.

Theoretical Orientation of the Study: A sociocultural view of literacy

The term *'literacy'* means different things to different people. Traditionally, literacy was seen as a set of skills learnt through drill and memorisation and meant 'reading and writing'. Children when they had reached a particular developmental stage were *'ready'* to learn to read and write. This view was based largely on Piaget's theories of universal development stages. Piaget (1962) claimed that children go through a sequence of specific developmental stages and that this cognitive development was necessary before learning could take place. His theories have impacted on teaching and learning for decades; however, the theories of Vygotsky (1978), who lived during the same era as Piaget, have challenged these views of learning. Vygotsky saw the social context of the child's environment to be of utmost importance in the development of learning. Vygotsky believed that language built cognitive structures and that learning itself impacted on development. As Reid and Comber (2002, p17) explain:

> Piaget saw language as a vehicle for expressing thought developed in the mind. In this sense it simply carried meaning – the child did not construct meaning in language, language *communicated* the results of thinking. Learning literacy was therefore relatively straightforward – a matter of acquiring skills to read and write print.

In contrast to this view, Reid and Comber (2002, p17) state:

> For Vygotsky, language was quite different – it *enabled* thought, and *produced* learning in interaction with others. Talking and thinking were as central to literacy learning as reading and writing. Vygotsky (1978, p57) wrote: 'every function in the child's cultural development appears twice; first, on the social level, and later, on the individual level; first between people (interpsychological) and then inside the child (intrapsychological)'. This means that social experience, rather than 'natural development', influences what and how children learn.

Vygotsky's beliefs have impacted upon what we now call a 'sociocultural' view of literacy learning. In recent times, most researchers and teachers recognise the role of the home or community environment in early literacy learning, and emphasise that

literacy begins from birth. As cited in Reid and Comber (2002), Bourdieu (1991) refers to this early learning as *capital*. When children begin school, they bring economic, cultural, social, symbolic and linguistic *capital* to the school setting. Children also bring to the school setting their *habitus*; these are sets of dispositions acquired in daily life.

Moll (1992, p21) also refers to this *capital* as '*funds of knowledge'*. And she, along with Heath (1983), Bourdieu (1991), Dyson (1993), Comber (1997) and Thomson (2002) express growing concerns for young children from diverse backgrounds and the mismatch between their backgrounds (*capital or habitus*) and what is termed '*school literacy*'. This concern is not because these children lack literacy skills but that the literacy skills they have are not valued by the school. Dyson (1993) found, in her study of children from diverse backgrounds, that children's acquired knowledge of the media and popular culture was considered, in the school setting, inferior to other, more acceptable prior-to-school experiences (like exposure to children's literature, or visits to museums). Although she found that schools did not build on the children's '*funds of knowledge*' (Moll 1992), Dyson showed how this material could be used as a '*bridge to school literacy'*. In learning to write at school, Dyson (1993, p6) found that,

> young children from diverse backgrounds bring diverse experiences to symbol-producing – talking, drawing, playing, storytelling, and, in our society, some kind of experience with print, all of which are resources with which both teachers and children can build new possibilities.

Michaels (2006) also found in her examination of first-grader classroom '*sharing tim*e' or '*news time*' that teachers' instructional strategies can serve as a '*bridge into literacy*' as the children adapt their home-based oral discourse to the demands of classroom expository prose.

Success or failure in literacy learning, it can therefore be argued, is largely dependent upon *access* to '*school literacy'*. This *access* closely aligns with children's prior learning in the social, cultural, moral and political background of their early learning environments. Furthermore, students' *access* to school literacy relies on the ability of teachers to 'build bridges' from the children's early literacy learning into the broad range of literacies that exist in the context of schools. As cited in Fleer and Raban (2006), Rogoff and Chavajay (1995), claim,

> socio-cultural theory recognises that learning does not simply reside in the individual, but, is intrinsically related to participation with others in socio-culturally relevant activities, transforming cultural frameworks and artefacts/tools across contexts.
>
> (cited in Fleer & Raban 2006, p47)

This inquiry of kindergarten children's multiliteracies in the home is framed within this sociocultural view of literacy as it: explores children's home backgrounds; relates gender issues to early literacy learning; and, frames literacy as a multi-faceted journey of learning. The sociological and economic factors influencing children's daily lives through advances in technology (such as computers, the internet, email, DVDs, CD-ROMs and ever changing telecommunications) mean that children's literacy learning is no longer only shaped by paper and print-based materials, but is embedded in a variety of new technologies and social practices. Adopting this perspective has implications for all teaching and learning in today's schools.

Schools in this study are bound by current policy and curriculum of the New South Wales Government's Board of Studies and the New South Wales Department of Education. It is, therefore, necessary to explore briefly just what these documents advocate with respect to early literacy learning and technology.

Current Policy and Curriculum of the New South Wales (NSW) Department of Education and Training (DET)

The second question in this inquiry examines how the multiliterate practices and skills of the kindergarten children in the study relate to the expectations, in the first year at school, of current policy and curriculum of the NSW DET. This material is briefly described in this section. A full analysis of these documents and how this material relates specifically to this inquiry is discussed in the Chapter Four.

In NSW government schools, teachers are bound by policies and syllabuses developed by the NSW Board of Studies (BOS) as well as those developed by the NSW Department of Education (DET).

What is the Board of Studies NSW?

The Board of Studies NSW was established in 1990 to serve government and non-government schools in the development of school education for Years K-12. It provides educational leadership by developing quality curriculum and awarding secondary school credentials, the School Certificate and the Higher School Certificate.

The Board of Studies:

- sets the core curriculum by developing syllabuses for Kindergarten to Year 12 and provides support materials for teachers and parents;
- manages the NSW School Certificate external Tests (Year 10) and the Higher School Certificate Examinations (Year 12) each year;
- assesses student achievement and awards high quality credentials to meet the needs of the full range of students;
- promotes the provision of quality education by developing, communicating and implementing educational policies and practices;
- provides advice on grading and assessment policy and procedures;
- promotes the provision of quality education through the registration and accreditation of non-government schools, certifying that they may teach students and enter students for the examinations; and
- effectively manages its resources so that educational objectives are met.

(Board Of Studies NSW 2008)

Syllabuses

The current BOS NSW syllabuses were developed individually in the period 1996 to 2002 in the following six Key Learning Areas (KLAs) for primary schools:

- English;
- Mathematics;
- Science and Technology;
- Human Society and Its Environment (HSIE);
- Personal Development, Health and Physical Education (PDHPE); and
- Creative Arts.

The syllabuses have been written within what is referred to an Outcomes Standard Framework. Therefore each syllabus outlines specific outcomes that should be achieved at specific stages. Each outcome has a set of indicators that serve as markers of children's progression.

Stages

- Early Stage 1 includes Kindergarten (children aged approximately 4 years, 6 months to 6 years);
- Stage 1 includes Years 1 and 2 (children aged approximately 5 years, 6 months to 8 years);
- Stage 2 includes Years 3 and 4 (children aged approximately 7 years, 6 months to 10 years); and
- Stage 3 includes Years 5 and 6 (children aged approximately 9 years and 6 months to 12 Years).

Outcomes

Syllabus outcomes are specific statements of the results intended by the syllabus. These outcomes are achieved as students engage with the content of the syllabus. They are arranged in stages. The outcomes are statements of the knowledge, skills and understandings expected to be gained by most students as a result of effective teaching and learning by the end of a stage.

Indicators

Each outcome in the syllabus is accompanied by a set of indicators. An indicator is a statement of the behaviour that students might display as they work towards the achievement of syllabus outcomes. Indicators exemplify the range of observable behaviours that contribute to the achievement of outcomes. They assist teachers to monitor student progress within a stage as well as to make an on-balance judgement about the achievement of outcomes at the end of a stage.

The English K - 6 Syllabus and Support Documents (Board of Studies NSW 1998)

The teaching of literacy is specifically outlined in the *English K-6 Syllabus*. The syllabus is organised into three strands:

- Talking and Listening;
- Reading; and
- Writing.

While there is some mention of the use of technology in the syllabus, there is no section specific to 'techno-literacies'.

The following document was released in 1997 that did have a specific focus on the use of technology in all KLAs.

Computer-based Technologies in the Primary KLAs (NSW DET 1997)

While the teaching of technology is embodied in all of the six syllabuses, the document *Computer-based Technologies in the Primary KLAs* (NSW DET 1997) outlines five capabilities in the use of technology. These are:

- Using computer-based technologies to locate, access, evaluate, manipulate, create, store and retrieve information;
- Expressing ideas and communicating with others, using computer-based technologies;
- Developing an awareness of the range of applications of computer-based technologies in society;
- Discriminating in the choice and use of computer-based technologies for a given purpose; and
- Developing the confidence to explore, adapt and shape technological understandings and skills in response to challenges now and in the future (p11).

Literacy and technology

Over the past ten years there have been many policy statements and documents developed either by BOS or DET that provide clear positions on how the explicit and systematic teaching of literacy will take place in all classrooms from Kindergarten to

Year 12. Since these policies are mandatory, it is interesting to note whether there is any reference to the role of technology in literacy learning and practices. The following table identifies each of these documents in order of their publication dates. Any references to techno-literacies are noted.

Overview of the Relevant Documents

Document	*Year*	*BOS*	*DET prev. DSE*	*Reference to techno-literacies*
Focus on Literacy: A position paper on the teaching of literacy	1997		✓	Y minimal
Teaching Reading: A K-6 framework	1997		✓	N
Teaching Reading in Early Stage 1	1997		✓	N
Computer-based Technologies in the Primary KLAs	1997		✓	Y
English K-6 Syllabus	1998	✓		Y
Focus on Literacy: Spelling	1998		✓	N
Focus on Literacy: Writing	1999		✓	Y minimal
Focus on Literacy: Talking and listening	2003		✓	N
Foundation Statements: Early Stage 1	2005	✓		Y minimal
State Literacy Plan 2006-2008	2006		✓	Y minimal
Our Young Learners: Giving them the best possible start	2006		✓	Y
English K-6 Syllabus	2007	✓		Y
Best Start: Kindergarten assessment	2007		✓	N

Table 1.1 Overview of the relevant documents

A more detailed analysis of these documents is included in the following chapter. The expectations of policy and curriculum in the first year at school are also included in Chapter Seven where the results of this inquiry are discussed in relation to the research questions.

The changing nature of literacy

It is important when analysing these documents to explore how they define what constitutes literacy and literacy practices and whether these definitions include any reference to multiliterate practices.

The document developed for all DET primary teachers, *Teaching Reading: A K-6 framework* (NSW DSE 1997b) was developed in 1997 and provides the following definitions of reading:

> Reading is the process of constructing meaning from written text.
>
> Reading is an essential part of literacy. Any discussion of reading must take place in the context of what it means to be literate in today's society. The following definition of literacy underpins these materials.
>
> "Literacy is the ability to read and use written information and to write appropriately, in a range of contexts. It is used to develop knowledge and understanding, to achieve personal growth and to function effectively in our society. Literacy also includes the recognition of numbers and basic mathematical signs and symbols within text.
>
> Literacy involves the integration of speaking, listening and critical thinking with reading and writing. Effective literacy is intrinsically purposeful, flexible and dynamic and continues to develop throughout an individual's lifetime.
>
> All Australians need to have effective literacy in English, not only for their own personal benefit and welfare but also for Australia to reach its social and economic goals" (Australia's Language: The Australian Language and Literacy Policy, Department of Employment, Education and Training 1991).
>
> (NSW DSE 1997b, p6)

To gain an understanding of the current NSW DET position on literacy and the role that technology now plays in what it means to be literate in today's society, the following definition, posted on the literacy homepage of the DET Curriculum Support (2006) website, needs to be noted.

> Literacy is the ability to read and use written information and to write appropriately, in a range of contexts. It is used to develop knowledge and understanding, to achieve personal growth and to function effectively in our society. Literacy also includes the recognition of number and basic mathematical signs and symbols within text.
>
> Effective literacy is intrinsically purposeful, flexible and dynamic and continues to develop throughout an individual's lifetime.
>
> This includes increasingly the use of electronic media and information technologies, both as a means of self-expression and for accessing and assessing the vast stores of knowledge available today.
>
> Visual literacy, verbal literacy, digital literacy and print literacy contribute to understanding the complex range of multimodal texts presented in the education and public domains. The ways images, sound and print interact to produce texts and particular social and cultural views of the world are the focus of analytical and critical reading that schools are engaged in teaching.
>
> (NSW DETCSD 2006)

Methodological Orientation

The research design developed for this study is situated within a qualitative paradigm. It uses survey, interview and participant observation methods. The purpose of the survey used in the initial phase is to provide a broad context of literacy practices across the three schools. It was never the intent to use this survey for statistical purposes. The research design draws upon multiple research methodologies of ethnography, case study and narrative inquiry. The research design has three distinct and separate research phases:

- Initial Phase: Survey using questionnaires
- Immersion Phase: Case studies using interviews and observations

- Mapping Phase: An analysis of relevant documents

Locus of study

This inquiry was executed at three schools in the Sydney metropolitan area. Although, geographically, the three schools are within a twenty kilometre radius of each other, the schools are situated in three diverse suburbs. Within the families in each of these suburbs, there is a diversity of background - race, cultural background, language, family structure, life experience, and work and leisure activities.

School No. 1 is situated in a quiet area away from main highways and consists mainly of large, expensive, private, separate homes; many of which are set among the bushland with views of the bay. A couple of blocks of townhouses and villas have been developed over recent years to accommodate couples with children no longer living at home. There is no rail access. Within this suburb, there are two corner stores, a small shop near the bay, a yacht club, a park land and the local public primary school.

School No. 2 is situated in a busy, semi-industrial suburb with a major highway separating industries, shops, private homes and blocks of units. Strip development lines both sides of the highway. There is an established shopping area in one of the main adjoining streets, and sporting fields adjacent to the highway. There is a rail link to the inner city. The suburb's primary and high school are both public schools. Private homes are mainly well established, small and modest. There are both well established blocks of units and new developments.

School No. 3 is situated in a busy suburb, which provides the major business facilities for surrounding suburbs; a shopping area including restaurants, an entertainment centre, a library, council buildings, major sporting complexes, a private school and two primary schools. One of these primary schools caters for students with special learning needs. The suburb also provides a major rail link for commuters travelling to the inner city for work and, therefore, there are numerous well established blocks of units and flats and many new unit and town-house developments. Family homes are small, modest and well established.

Thesis Overview: The story to come …

This chapter serves to identify the purpose of this inquiry and explain the significance of exploring the multiliterate practices of young children in their homes. It situates literacy learning within a sociocultural view of literacy and briefly outlines the current policy and curriculum of the NSW DET relevant to literacy learning in the first year at school. In this first chapter, the methodological orientation and locus of study have been briefly described. More information regarding the site and the participants can be found in following chapters.

As this inquiry unfolds it sets the context for, and tells the stories of, five children, their families and their learning. These stories will shed information about early literacy learning in the home to give understanding to parents, to inform teachers of young children in the school setting, and on a much broader scale, to inform policy makers in education who have the ability to improve the opportunities in schools for all children.

Chapter Two: Reviewing Past Stories

This chapter reviews past literature. It briefly reviews children's learning as a whole and more specifically literacy learning in the home and sets the inquiry within a sociocultural view of literacy. The review focuses on the role of socioeconomic background and gender construction in young children's literacy learning and also reviews the role of technology in what it means to be literate in today's society.

Chapter Three: Developing the Story

The research design and methodologies used in this inquiry are explained in this chapter. This inquiry is a qualitative study using a multiple methodological approach. Ethnography, case study and narrative inquiry are interwoven throughout the design and each of these methodologies are explained and justified.

Chapter Four: Documents … and Their Stories

This chapter analyses current policy and curriculum of the New South Wales (NSW) Government's Board of Studies (BOS) and the New South Wales (NSW) Department of Education and Training (DET) that relate to literacy learning in the first year at school.

Chapter Five: Understanding the Context of the School Stories

In this chapter, the data from the initial phase of the inquiry is documented and analysed. The results of the survey of 123 kindergarten parents from the three schools in the study provide an understanding of literacy learning in these focus schools, in the Sydney metropolitan area.

Chapter Six: Understanding the Children's Stories

This chapter explicitly tells the stories of the five case-study children. Interpretive comment assists in 'making sense' of their literacy learning at home.

Chapter Seven: The Stories Merged

The results of the initial survey along with the children's stories are discussed in this chapter. This discussion is situated within the research questions.

Chapter Eight: Future Stories

The final chapter, Chapter Eight of this inquiry explores the implications of the findings for families, teachers of young children and policy makers. These implications have the potential to inform not only families and teachers but also future directions in policy and curriculum.

Chapter Two

Reviewing Past Stories

Chapter Two

Reviewing Past Stories

Introduction

An extensive search of the literature has been undertaken since June 2003. Searches on ERIC, PROQUEST, and INFORMIT and an examination of recent editions of journals, books, and information on the internet have produced a plethora of research related to children's literacy learning. From the available research, this chapter investigates the literature relevant to the current study by focusing on literacy research that exemplifies the following understandings:

- Literacy acquisition as a socially constructed skill;
- Early literacy learning in the home;
- The relationship between emergent literacy skills and later school success in literacy;
- Early literacy learning and adult-child shared storybook reading;
- Early literacy learning and socioeconomic background;
- Early literacy learning and gender; and,
- Early literacy learning in an electronically mediated world.

Despite years of research, and attempts to understand the relationship between the home environment and student success in literacy at school, many questions still exist. Two of these questions are addressed in the most recent edition of *The Social Construction of Literacy*, edited by Jenny Cook-Gumperz (2006).

Cook-Gumperz (2006, pi) asks,

> Why do children with similar classroom experiences show different levels of educational achievement? And why do these differences in literacy, and ultimately employability, persist?

These are very important questions that Cook-Gumperz asks and this inquiry also attempts to address these questions. In kindergarten classes across the state, year after year, children have similar experiences in the classroom; some learn quickly,

others struggle and many of these who struggle are given support through individualised school support programs and still there is a gap in children's educational achievements by the end of that first year at school. And this gap is most noticeable in the area of literacy where some kindergarten children learn to read and write, and others do not. These differences in literacy persist and as literacy achievement affects every other area of learning at school, ultimately children leave school in NSW thirteen years later with differing levels of achievement and, therefore, different levels of employability.

This chapter will review past literature about young children's early literacy learning. It will focus on the seven areas listed above to inform this inquiry. This inquiry will, in turn, also attempt to answer those two very important questions posed by Cook-Gumperz.

In attempting to answer these questions, in *The Social Construction of Literacy*, Cook-Gumperz, Campbell, Collins, Collins and Michaels, Eder, Michaels, O'Connor, Simons and Murphy, and Wells (Cook-Gumperz 2006, pi) "present a new perspective on literacy acquisition, viewing it as a socially constructed skill, whereby children must acquire discourse strategies that are socially 'approved'".

Other researchers, as explicated in the following section, also support the view of literacy as a socially constructed skill and as this current inquiry adopts this view, this perspective of literacy acquisition will now be explored.

Literacy Acquisition as a Socially Constructed Skill

As discussed in the first chapter of this thesis, the term *'literacy'* means different things to different people. Traditionally, literacy was seen as a set of skills learnt through drill and memorisation and meant *'reading and writing'*. Children when they had reached a particular developmental stage were *'ready'* to learn to read and write. This view was based largely on Piaget's theories of universal development stages. Piaget (1962) claimed that children go through a sequence of specific developmental stages and that this cognitive development was necessary before learning could take place. His theories have impacted on teaching and learning for decades, however, the theories of Vygotsky (1978), who lived during the same era as Piaget, have challenged these views of learning. Vygotsky saw the social context of the child's environment to be of utmost importance in the development of learning. Vygotsky

believed that language built cognitive structures and that learning itself impacted on development. As Reid and Comber (2002, p17) explain,

> Piaget saw language as a vehicle for expressing thought developed in the mind. In this sense it simply carried meaning – the child did not construct meaning in language, language *communicated* the results of thinking. Learning literacy was therefore relatively straightforward – a matter of acquiring skills to read and write print.

In contrast to this view, Reid and Comber (2002, p17) state,

> For Vygotsky, language was quite different – it <u>enabled</u> thought, and <u>produced</u> learning in interaction with others. Talking and thinking were as central to literacy learning as reading and writing. Vygotsky (1978, p57) wrote: 'every function in the child's cultural development appears twice; first, on the social level, and later, on the individual level; first between people (interpsychological) and then inside the child (intrapsychological)'. This means that social experience, rather than 'natural development', influences what and how children learn.

Vygotsky's beliefs have impacted upon what we now call a *'sociocultural'* view of literacy learning, and in recent times, most researchers and teachers recognise the role of the home or community environment in early literacy learning, and emphasise that literacy begins from birth. As cited in Reid and Comber (2002, p20), Bourdieu (1991) refers to this early learning as *capital.* When children begin school, they bring economic, cultural, social, symbolic and linguistic *capital* to the school setting depending on their prior-to-school experiences in the first five years. This *capital* is very different for every child but more different for some including: the poor; indigenous children and those from non-English speaking backgrounds (NESB); and, the disabled including physical, emotional and behavioural. Children also bring to the school setting their *habitus*; these are sets of dispositions acquired in daily life.

Furthermore, Moll et al. (1992) also refer to this *capital* as *'funds of knowledge'*. These researchers, along with Heath (1983), Bourdieu (1991), Dyson (1993 & 2002), Comber (1997), Thomson (2002) and Dyson (2002) express growing concerns for young children from diverse backgrounds and the mismatch between their backgrounds (*capital or habitus*) and what is termed '*school literacy'*. This concern is

not because these children lack literacy skills but that their literacy skills are not valued by the school. Dyson (1993) found in her study of children from diverse backgrounds that children's acquired knowledge of the media and popular culture was considered, in the school setting, inferior to other more acceptable prior-to-school experiences (like exposure to children's literature or visits to museums). Although she found that schools did not build on the children's '*funds of knowledge'* (Moll 1992, p21), Dyson showed how this material could be used as a '*bridge to school literacy'*. In learning to write at school, Dyson found that,

> Young children from diverse backgrounds bring diverse experiences to symbol-producing – talking, drawing, playing, storytelling, and, in our society, some kind of experience with print, all of which are resources with which both teachers and children can build new possibilities.
>
> (Dyson 1993, p6)

Michaels (2006) also found in her examination of first-grader classroom '*sharing time'* or '*news time'* that teachers' instructional strategies can serve as a '*bridge into literacy'* as the children adapt their home-based oral discourse to the demands of classroom expository prose. Parents are also important in this process of adapting *'home literacies'* to '*school literacies'* and can support teachers in building this *'bridge into literacy'.* As Nistler and Maiers (2000, p670) suggest, families can "provide teachers with a vast reservoir of talent, energy and insight" into their children's knowledge and competencies, but add that this reservoir often remains largely untapped. Through home-school communication, the transition from home to school can be capitalised on by the teacher to advantage the child's learning. This view is emphasised by Wells (2006, p77) who argues that teacher interactions in the first few months at school are, "probably the most important influences to the success with which students are able to apply their intellectual abilities to the tasks that make up the overt curriculum". McNaughton (2002) has also argued that children are more likely to succeed in literacy if there is a close pedagogical *'match'* between home and school.

Success or failure in literacy learning, it can therefore be argued, is largely dependent upon access to '*school literacy'* that closely aligns with children's prior learning in the social, cultural, moral and political background of their early learning environments, as well as upon the ability of teachers to '*build bridges'* from the

children's early literacy learning into the broad range of literacies that exist in the context of schools.

Rogoff and Chavajay (1995), as cited in Fleer and Raban (2006, p47) claim,

> socio-cultural theory recognises that learning does not simply reside in the individual, but, is intrinsically related to participation with others in socio-culturally relevant activities, transforming cultural frameworks and artefacts/tools across contexts.

This inquiry of kindergarten children's multiliterate practices in the home is framed within this socially constructed view of literacy as it explores children's home backgrounds, relates gender issues to early literacy learning and frames literacy as a multi-faceted journey of learning. The sociological and economic factors influencing children's daily lives through advances in technology (such as computers, the internet, email, DVDs, CD-ROMs and ever changing telecommunications) mean that children's literacy learning is no longer only shaped by print and paper-based materials, but is embedded in a variety of new technologies and social practices. The following section will focus on early literacy learning in the home.

Early Literacy Learning in the Home

In preparing for this inquiry, it was found that a large body of research has explored the links between success at school and the home environment, and it is well documented that parent involvement in children's education is an important element in effective schooling (Cairney and Munsie 1995; Delgado-Gaitan 1991; Epstein 1983; Sledd 2001). The dominant role of the home environment in developing emergent literacy skills in preschool children is firmly established (Brooker 2002; Brown 1998; Cairney & Munsie 1992; Cairney & Ruge 1997; Hewison & Tizard 1980; Kruger & Mahon 1990; Manzo & Robelen 2003; Mason 1992; McNicol & Dalton 2002; Purcell-Gates & Dahl 1991; Roskos & Neuman 2002; Rutter, Tizard & Witmore 1970; Thompson 1985; Wells 1986). Studies have also identified emergent literacy skills needed for success in literacy at school (Lonigan, Burgess & Anthony 2000; Morris, Bloodgood & Perney 2003; Pullen & Justice 2003; Stuart 1995; Whitehurst & Lonigan 1998), while others have revealed sociocultural diversity in literacy learning (Barratt-Pugh 2000; Bourdieu 1977; Comber & Kamler 2004; Heath 1983; Luke 1993; McLane & McNamee 1990; Thomson 2002).

In his book *Reading Begins at Birth*, Doake (1988) in his ethnographic studies explores the homes of preschool children and documents and tape-records all events of his own son and of other children and their families. The records of his visits are rich and descriptive, with details of parents reading to their children from birth, cradling their new-borns in literacy rich environments, and then recording these children's attempts at reading. These records also include other children's attempts at reading. These children are not so fortunate; they struggle with reading, they have not been nurtured from birth with literacy-rich environments and for them, learning to read at school is difficult. These ethnographic studies by Doake are a testament to Bruner's words (1978) when he states that language development begins long before a child ever utters his or her first words. Wells (1986, p34) agrees, arguing,

> Parents play a dominant role in the development of spoken language, intuitively prompting and prodding their children towards meaning making. From birth, parents treat their babies as if they are communicating with them, and they respond to them in the light of this purpose.

Furthermore, Schaefer (1991) states that there appears to be a high positive correlation between *parent knowledge, beliefs and interactive styles*, with children's school achievement. Schaefer's study is supported in studies by White (1982) and Cairney and Munsie (1995). White (1982) found a weak correlation between school achievement and parent occupation, income or education, and concluded that it may be *how parents interacted with their children* that made the difference. Cairney and Munsie (1995) found that *differences in family backgrounds* appeared to account for a large share of variance in student achievement including literacy. Hewison and Tizard (1980) also suggested that *parent help with reading* is a better predictor of success in reading than the child's intelligence.

Research also by Jencks et al. (1972), Hanushek (1981) and Thompson (1985), as cited in Cairney and Munsie (1992) have found that classroom organisation and methods are relatively minor factors in student achievement at school and that *differences in family background* have a far more significant impact on student achievement. Furthermore, Rutter, Tizard and Witmore (1970) and Thompson (1985) suggest that the *cumulative effect of a range of family-related factors* probably accounts for the greatest variability in student literacy performance. Wells (1986),

Purcell-Gates and Dahl (1991) and Mason (1992) also found that *home literacy measures* related to school literacy achievement.

Heath (1983) found in her studies of three very different communities in the Piedmont Carolinas, that there was considerable cultural variation in the acquisition of oral language and the *manner* in which parents introduced children to literacy. The *culture of the home environment* directly affected the children's performances in literacy at school. Heath (1983) and Teale (1984) conclude that both cultural and social structural factors affect preschool children's orientation to literacy.

Studies of 24 preschool children from low-income families over a period of 3 to 18 months, by Teale and Sulzby (1988, p192) concluded that "virtually all children in a literate society like ours have numerous experiences with written language before they ever get to school". This conclusion is also supported by the research of Heath (1983), Taylor (1983), Harste, Woodward and Burke (1984) and studies reviewed by Goodman (1988). These literacy experiences were mainly social; there was a wide range in the *quantity of time spent engaged in literacy experiences*, and some children *'read'* and '*wrote'* by themselves far more than others.

Sledd (2001), in reviewing Handel's (2001) work on *Building Family Literacy in an Urban Community,* states that *family support* has been identified as a critical factor in acquiring literacy skills; however, encouraging parents to read to their children is not enough. Sledd argues that parents also need to understand *how their children learn* and how they (the parents), can be instrumental in their children's education.

Payne, Whitehurst and Angell (1994) studied 323 4-year-olds attending *Head Start* (a program in the United States for children from low socioeconomic areas). In the first study, of 236 children, 12% to 18.5% of the variance in child language scores was accounted for by the *home literacy environment*, after the effects of caregiver IQ and education were removed in a hierarchical regression. These results were cross-validated on a secondary sample of 87 children with similar results.

All of the studies cited above consistently argue that differences in family background and culture, and how parents interact with their preschool children in literacy activities at home from an early age, affect children's literacy achievement at school. It is agreed that the literacy concepts, knowledge and skills developed in early childhood

are excellent predictors of children's future success in reading (Adams 1990; Donaldson 1978; Snow, Burns & Griffin 1998; Whitehurst & Lonigan 1998).

To further understand the range of literacy activities in the home that parents participate in with their young children, and to add to our understanding of young children's '*funds of knowledge'* in literacy that they bring to the school setting, this inquiry set out to gather data from three Sydney metropolitan schools in order to establish the range of multiliterate practices of kindergarten children in their homes. This information has the potential to add to current research.

In the next section, the research identifying the relationship between emergent reading skills and later school success in literacy is reviewed.

The Relationship between Emergent Literacy Skills and Later School Success in Literacy

There have been extensive longitudinal studies that have explored the relationship between school success in literacy and the emergent literacy skills of young children. Several of these studies are outlined below.

Neuman (1996), Justice and Ezell (2000) and Wade and Moore (2000) have found that *encouraging parents to read with their preschool children* has been found to promote reading attainment*. In contrast,* a report by Little and Box (2002) states that several initiatives have been developed and implemented prior to school to improve reading and writing abilities of children; but, despite these intervention strategies, language and literacy deficits still exist for many children entering kindergarten.

Furthermore, consistent with other researchers (DeBaryshe et al. 1992; Scarborough, Dobrich & Hager 1991; Share et al. 1984; Thomas 1984), Payne, Whitehurst and Angell (1994) found very *low correlations between adult reading practices and child language ability*. In contrast, as cited in Burgess, Hecht and Lonigan (2002), Wagner, Torgesen and Rashotte (1994) state that *early individual differences in reading* are one of the most powerful potential causes of later individual differences in reading. In addition, studies by Manzo and Robelen (2003) established that *literacy experiences prior to school entry* positively affect school performance in reading and writing.

Studies by Wells (1986), Watson (1989), Dickinson and Tabors (2001), Leseman (1993), and Beals, De Temple, and Dickinson (1994) reported relationships between *home literacy experiences* and the development of vocabulary, conceptual knowledge and language comprehension skills at different preschool ages.

For Adams (2002, p67), the evidence is clear-cut when she states that in order for children to learn to read all children must:

- know the letters of the alphabet;
- understand their linguistic significance (phonemic awareness); and,
- learn the logic and conventions governing their use.

Other research identified what has been labelled *'emergent literacy skills'* as affecting achievement in reading at school (Lonigan, Burgess & Anthony 2000; Morris, Bloodgood & Perney 2003; Pullen & Justice 2003; Stuart 1995, Whitehurst & Lonigan 1998).

Whitehurst and Lonigan (1998) indicated *three emergent literacy factors* associated with later reading achievement which were:

- phonological awareness;
- print awareness; and,
- oral language.

Studies by Stuart (1995) and Lonigan, Burgess and Anthony (2000) concur that the above three areas of emergent literacy (phonological awareness, print awareness and oral language) represent a significant source of the *individual differences in later reading achievement.*

In developing phonemic awareness, a study by Ukrainetz et al. (2000 cited in McLachlin 2007, p20) "found that children receiving specific scaffolding within the context of a story-reading session gained in three phonemic tasks: first sound identification; last sound identification; and, sound segmentation".

Also in their research, Pullen and Justice (2003) list strategies that have been shown to improve phonological awareness, print awareness and oral language, such as:

- rhyme and alliteration activities;

- blending and segmenting;
- adult-child shared storybook reading;
- print-enriched play;
- focused stimulation of oral language; and,
- interactive reading.

Another study by Morris, Bloodgood and Perney (2003) with 102 children showed that four kindergarten skills (alphabet recognition; concept of word in text; spelling with beginning and ending consonants; and, word recognition):

- effectively predicted success in first-grade reading; and,
- *gave effective predictions of first and second grade reading achievement* in the middle of the kindergarten year.

In the same study, a *phonemic spelling task* was also superior to an oral phoneme segmentation task in predicting success in beginning reading.

The combined studies above suggest that the emergent literacy skills needed for future success in literacy are:

- oral language;
- phonological awareness;
- alphabet recognition;
- print awareness and concept of word in text;
- word recognition; and,
- spelling with beginning and ending consonants.

The research literature, it can be clearly argued, establishes the emergent literacy skills that impact on later school success in literacy. It seems, therefore, imperative for parents, teachers and policy makers to have a clear understanding of these emergent literacy skills. For parents, such knowledge will better equip them to prepare their children for school. For teachers, it will better inform them in providing appropriate teaching and learning programs that build on children's emergent literacy skills. And for policy makers, it will ensure they are better able to develop relevant assessment and curriculum policies.

In exploring kindergarten children's multiliterate practices in their homes, we will have a greater understanding of the home practices parents and children participate in that

have positive effects on their emergent literacy skills. This information has the potential to inform all stakeholders; parents, teachers and policy makers.

Equally as important is understanding how emergent literacy skills are developed. Many researchers and writers claim that adult-child shared storybook reading is a valuable activity in developing emergent literacy skills in young children. In this next section the relationship between early literacy learning and adult-child shared storybook reading will be explored.

Early Literacy Learning and Adult-Child Shared Storybook Reading

Engaging in *storybook reading* with a child has long been thought to be the single most common and, arguably, the most important activity for building the knowledge and skills required for literacy including book conventions and language, comprehension, motivation and positive attitudes (Bus, van Ijzendoorn & Pelligrini 1995; Butler 1995; Dickinson & Tabors 2002; Saracho 1999; Scarborough & Dobrich 1994; Wells 1985).

Harris (2007, p159) reports,

> The significance of storybook reading has been most recently taken up as part of *Australia's National Read Aloud* initiative (Department of Education, Science and Training 2005), encouraging educators, families and communities to work together to ensure that children are read aloud to, so they may know the benefits of this experience for their literacy learning.

Many other studies have also identified activities related to adult-child shared storybook reading that enhance children's emergent skills in literacy (Bus, van Ijzendoorn & Pelligrini 1995; Jackson, Donaldson & Cleland 1988; Scarborough & Dobrich 1994; Senechal et al. 1998). McLachlin (2007, p21) argues that regular adult-child shared reading of storybooks is a major method of promoting a variety of literacy skills in the early years and is,

> an ideal context in which to develop literacy because it provides opportunities for assisting children's knowledge and skills, such as developing concepts

about print, a story schema, new vocabulary, and understanding text and story narratives, which aids understanding of decontextualised language.

Furthermore, Jackson et al. (1988) and Senechal et al. (1998) found that parents of precocious readers *read storybooks frequently to their children*, and most parents also reported *teaching about reading to their children*. Their results suggest that parent teaching and storybook reading may be highly correlated.

In examining storybook reading, Senechal et al. (1998), in their study, addressed three questions:

- What is the relationship between storybook reading and parent teaching?
- Do both storybook reading and parent teaching predict oral and written language skills?
- Do storybook reading and parent teaching predict word reading at the end of Grade 1?

Results were inconsistent with *no correlation* being found between storybook reading and parent-reported teaching about reading and writing words. Storybook reading predicted only *oral-language skills* whereas parent teaching predicted only *written-language skills*. The impact of home literacy experiences on children's reading at the end of Grade 1 was mediated through oral and written language skills. Parent teaching did not account for any additional variance in word reading once oral and written language skills were entered in the model. Storybook exposure, however, accounted for an additional 2% of the variance. *Oral and written language skills* predicted later reading, specifically word reading at the end of Grade 1. With the above study, however, methodological concerns included reliability of parent reports of reading activities.

Reviews of research by Bus et al. (1995) concluded that individual differences in preschool exposure to shared reading explained about 8% of the variance of the outcomes studied. Scarborough and Dobrich (1994) reported a median correlation of .26; but, Burgess, Hecht and Lonigan (2002) found statistically significant relations between the *home learning environment (HLE) and oral language, letter knowledge, phonological sensitivity and word reading skills* in young children. The magnitude of the relations was a function of the manner in which the HLE was conceptualised, the ability assessed, and whether the relations were concurrent or longitudinal.

In the same article, Whitehurst and Lonigan (1998), suggest that the weak empirical support found between shared reading and a single measure of emergent literacy outcome was too simple in its approach. Bus et al. (1995) and Scarborough and Dobrich (1994) agree that the HLE is complex and multifaceted and studies to understand the *nature* of the relationships between the HLE and the development of language and literacy development need to reflect this. Other researchers have found that different aspects of the HLE affect different outcomes (Meyer et al. 1994; Whitehurst et al. 1994).

Also, studies by Snow et al. (1991) and Weinberger (1996) associate *storybook reading* with later language and literacy development; but, a later study with 126 low-income, African-American preschool and school aged children by Britto (2001) found that parents and caregivers need to expose children to print in a *variety of ways other than storybook reading*. This study is supported by Wood (2002), who considers the nature of joint (parent-child) pre-school activities in the home and concludes that children who engaged in a *variety* of pre-school, parent-child activities showed the best achievement in reading one year later. The *frequency* of joint activities was also found to impact on reading attainment, vocabulary, memory and aspects of phonological awareness. There was some evidence that children who were 'above average' at reading had received more *frequent* storybook reading and played word games *more often* than the children who were at or below average. This is consistent with studies by Weinberger (1996) and Wade and Moore (2000). There were demonstrated relationships between *singing and rhyme awareness*, and between *rhyme awareness and reading and spelling development.* Studies by Bradley and Bryant (1978, 1983), Wood and Terrell (1998a, 1998b) and Passenger, Stuart and Terrell (2000) supported these results.

A study by Sonnenshein and Munsterman (2002) has reported that reading *frequency* was the only significant correlate of children's early literacy-related skills, and that the *affective quality* of the reading interaction was the most powerful indicator of children's motivation for reading. Other research by Baker, Scher and Mackler (1997) revealed a negative relation between affective quality and discussion of print. That is, the affective quality was lower when there was more discussion about the print. In Sonnenshein and Munsterman's (2002) study, they found that neither the type of utterance nor the affective quality was significantly related to any of the literacy-related skills assessed. The literacy-related skills assessed included

phonological awareness, orientation towards print and story comprehension. Children who experienced *more positive reading interactions* at the beginning of kindergarten reported more positive motivations towards reading when they were in first grade. Gambrell and Morrow (1996) and Oldfather and Wigfield (1996) found other factors thought to predict reading motivations including the child's role in selecting a text for reading, how interesting the text is and how understandable it is.

In studies by Scarborough, Dobrich and Hager (1991) it was found that 34 pre-schoolers who became better readers had more *frequent* literacy-related experiences than the 22 pre-schoolers who became poorer readers. Studies by DeBaryshe (1995), Senechal et al. (1998) and Burgess (1997) found measures of *cumulative reading exposure* to be more predictive of developmental outcomes than questions that are designed to assess current shared reading practices.

This inquiry explores the multiliterate practices of young children in their homes, and in exploring the print and paper-based literacy practices, data about adult-shared storybook reading and the activities parents participate in when reading storybooks to their children are collected through both the survey and visits to the case study children's homes. This inquiry adds to the extensive number of studies about early literacy learning and adult-child shared storybook reading cited above and informs us about practices in the home that develop young children's emergent literacy skills. By exploring kindergarten children's multiliterate practices in their homes in that very first year at school, teachers, parents and policy makers will have a deeper understanding of the skills that these children bring with them to the school setting.

The following section of this chapter will now be devoted to exploring socioeconomic background as it relates to the literacy learning of young children.

Early Literacy Learning and Socioeconomic Background

To situate socioeconomic background in the context of literacy learning, changes in our understanding of what it means to be literate need to be explored.

Our understanding of what it means to be literate has changed over the years from one of *'readiness'* tests and developing reading and writing skills through drills-based programs, to the emergence of a sociocultural view of literacy based on sociocultural theories of learning.

In the early 1900s, it was believed that children could only learn to read when they had reached a particular mental age. In the kindergarten year, therefore, teachers would focus on pre-reading activities with the aim of making children 'ready' for formal instruction in reading and writing. There was no understanding of what Comber and Kamler (2004) call '*funds of knowledge'*, knowledge about literacy that children bring with them to the school setting.

In 1954, Gesell reported,

> During the early part of the century it was believed that children could only learn to read when they had reached a particular mental age, brought about through a process of biological maturation.
>
> (Gesell 1954, p313)

Reading and writing were seen as separate skills and children were, therefore, taught these skills in isolation through skills-based drills of systematic, direct instruction.

During the late 1960s and 1970s research, mainly by Goodman (1967), Smith (1971) and Clay (1979), challenged this developmental view of literacy learning and argued that reading, writing and oral language development were interrelated and emerge over time through participation in literacy events. The family, extended family and community were thought to be central to this process. The '*whole-language'* approach (Goodman 1986) that encouraged print-rich environments and emphasised the integration of reading, writing, speaking and listening in the teaching of literacy was adopted in NSW schools. '*Process writing'* (Graves 1983) where children learned to write through writing also emerged.

The paradigm shift in the above belief of literacy learning had three major components:

- Viewing the teaching of literacy as an integrated 'whole';
- Acknowledging the role of parents, extended family and community members in the child's literacy learning; and,
- Recognising that children bring with them from the home environment, a variety of literacy competencies that can be built upon in the school setting. Pat Thomson (2002) referred to this learning as the children's '*virtual schoolbags'* that are full when children come to school, however, only some

children get the opportunity to make use of what is inside their *'schoolbag'* during their school lives.

In the 1990s, sociocultural theories based on research mainly by Bourdieu (1977) and Luke (1993) emerged. Barratt-Pugh (2000, p4) argued that,

> Literacy knowledge and competence differ according to the social and cultural context in which they are learned. Thus, there are not only different forms of literacy, but also different ways of doing particular literacy practices. Hence, children become familiar with a wide range of literacies undertaken in their family and community.

Research by McLane and McNamee (1990) also supports the sociocultural theories based on research by Bourdieu (1977) and Luke (1993). McLane and McNamee (1990, p7) report,

> The development of literacy, then, is a profoundly social process, embedded in social relationships, particularly in children's relationships with parents, siblings, grandparents, friends, caretakers and teachers. These people serve as models, provide materials, establish expectations, and offer help, instruction, and encouragement.

The culture of the child's family and community, and the ways in which they value learning, have been shown to be predominant factors in the ease in which the child becomes accepted into the school's culture and this in turn has a significant effect on the child's progress.

Heath's ethnographic studies (1983) of three different communities in the United States found that the child can be advantaged or disadvantaged at school depending upon whether, or not, the child's literacy experiences prior to school *'fit with'* or *'match'* school literacy expectations. Thomson's (2002) metaphor of the child's *'schoolbag'* is consistent with Heath's findings. The *type* of literacy learning the child brings from the home and community to school in his/her *'schoolbag'* will affect his/her success as a literacy learner. If the child's previous learning '*fits with'* or '*matches'* the school's literacy expectations, the child will be able to *'unpack'* and use the '*funds of knowledge'* (Comber & Kamler 2004) inside the pack. The less of a '*match'* between the school's literacy learning and the home and community

environment, the less able the child will be able to unpack his/her *'schoolbag'* to access his/her '*funds of knowledge'*. This mismatch between home and school learning, sadly, is all too true for many of our students including "the poor, the wilful, the disabled, the non-English speaking, the slow, the bottom 10%" (Comber & Kamler 2004, p293). McNaughton (2002) has also argued that children are more likely to succeed in literacy if there is close pedagogical match between home and school.

Nistler and Maiers (2000, p670) suggest that families can "provide teachers with a vast reservoir of talent, energy and insight" into their children's knowledge and competencies, but this reservoir often remains largely untapped. This transition from home to school can be capitalised on by the teacher to advantage the child's learning. This view is emphasised by Wells (2006, p77) who argues that teacher interactions in the first few months at school are "probably the most important influences to the success with which students are able to apply their intellectual abilities to the tasks that make up the overt curriculum".

From her studies Heath (1983, p70) concluded that, depending on children's prior experiences and their family and community's orientation to literacy, some children in their literacy learning at school "seem not to know how to take meaning from reading, they do not observe the rules of linearity in writing, and their expressions of themselves on paper is very limited".

To build on Heath's research, Cairney and Munsie (1992, p4) reported that the views of the child's teacher significantly affect the child's literacy development,

> The reality is that schools staffed by middle-class teachers reflect middle-class, culturally defined views of what literacy is and how it is best developed. It takes little effort to determine why specific cultural groups experience difficulties coping with literacy in such a context.

This view is supported by Henderson (2005) in her Queensland study of itinerant farm workers' children as literacy learners. She found that many teachers held a '*deficit view'* of any children who did not '*fit the norm'.* As Gilbert (2000, p5) argued, "school is not the same place for all Australian children and it's important that we recognise this and see it for the problem that it is".

Also, Fleer and Robbins (2005) in their study of literacy and numeracy enactments in the homes of families from lower socioeconomic circumstances found that a disparity existed between the *(preschool)* teachers' beliefs and family practices of literacy and numeracy within the home and community. They concluded,

> The teachers predominantly held a deficit view of parents' and the children's experiences of literacy and numeracy in the home… These deficit assumptions were so pervasive, that even after participating in professional learning in which the teachers were shown numerous examples of literacy and numeracy embedded in everyday home contexts, most teachers still clung to the belief that they were the primary providers of literacy and numeracy for these children.
>
> (Fleer & Robbins 2005, p35)

This deficit view and deficit stories often go beyond the classroom literacy learning and suggest that particular types of families are culpable for a whole range of social problems. According to Comber (1997, p23), deficit discourse "often becomes pervasive, conflating illiteracy, poverty and crime*",* thereby constructing poor children as "lacking" and,

> effectively blaming their parents not only for their poverty, but also for their poor behaviour, language and literacy. According to these accounts, poor = poor literacy, an equation which lays the blame with the child and the family.

Furthermore, Lee and Burkam (2002, p6) state,

> Young children do not begin school as equals. … Unfortunately, this status, which might be measured with appropriate tests of skills and knowledge, is associated with family background.

An exploration of kindergarten children's multiliterate practices in their homes focusing on the relationship between these practices and socioeconomic background may help to inform, and if necessary change, our practices in schools from a '*deficit view'* of children's prior literacy experiences to practices that will allow children to unpack their *'schoolbags'* and use their '*funds of knowledge'.* Perhaps then our schools will better *'match'* the learning our young children bring with them to the

school setting, and children will begin school a little more equal than they have been in the past.

This inquiry also concerned itself with gender differences in parents' support, encouragement, participation and expectations in the multiliterate practices of their boys, compared to their girls. The following section will explore the research in relation to early literacy learning and gender.

Early Literacy Learning and Gender

There are many studies in relation to the role that gender plays in young children's understanding of appropriate behaviours. Alloway (1995, p21) states that children learn these gender-appropriate behaviours in the very early years and argues,

> It is in the early years that girls and boys begin to learn about gender appropriate ways of behaving and relating, academic areas of interest and achievements, contextually determined relations of power, and patterns of desire.

This view is also supported by Berk (1997, p520) who states that "gender-appropriate behaviours begin so early in the preschool years that modelling and reinforcement must account for its initial appearance". Several other researchers have studied the role of gender within family discourse (Nichols 2002), oral language interactions at both home and school (Makin 2005) and in early literacy development (Razey 2002). Findings from these studies conclude that differences emerge in literacy learning depending on the child's gender.

Gender can be seen as a social construct, not only a biological distinction between the sexes. A contrast between sex and gender differences has been made by Gething and Hatchard (1989). Sex differences are "actual biological or psychological differences between the sexes" (Gething and Hatchard 1989, p500). Gender differences, however, "are differences between males and females, not based on biology, but open to societal and cultural influences" (Gething and Hatchard 1989, p494).

From birth, young babies are subjected to these societal and cultural differences. According to Freud (1856/1939) young children's attitudes and behaviours are

adopted through identification with the same-sex parent during the preschool years. Activity choices and behaviours of young children reveal that they have already adopted many of the gender-linked standards of their cultural community. Young children at play in the home, in long day-care centres, at pre-schools and in the wider community reveal these gender-appropriate behaviours as the boys can be seen building construction sites and playing with their cars, trucks and buses, and the girls are dressing up, taking care of their dolls and playing in the home or cooking corner.

Interesting observations were documented by Turner (1998, Unpublished Research Paper, University of Wollongong) where kindergarten children rotated, in mixed gender groups, across a number of different developmental play situations. When the boys were playing with the girls in the home corner (non-participation was not an option), the boys adopted traditional male roles, for example dressing up in a policeman's uniform and leaving for work, wearing a pilot's hat and flying interstate or overseas, turning the sink around to make a shop counter and using the cash register to sell articles in the home corner. On one occasion, one little boy said that there was no dad in the family, and rather than dressing up as a female, he became a dog and said, "I am a boy dog", and proceeded to run around and bark, eating food out of a container and then chewing up old clothes.

However, it has been shown that interactions with other-sex parents and adults, siblings, teachers and peers, along with gender appropriate behaviour in the surrounding culture, also play powerful roles. As cited in Mertens (1998), social learning theory, along with its emphasis on modelling and reinforcement and cognitive-development theory, with its focus on children as active thinkers about their social world, are major approaches to gender typing.

Further to social learning theory, Nichols (2002, p139) reports,

> The notion that girls are quicker to develop than boys has the status of fact both in scientific and popular domains; it is both a piece of conventional wisdom supported by parents' and teachers' anecdotes and a finding based on numerous comparative studies in the field of developmental psychology. From the standpoint of post-structural theory, however, the early superiority of girls, whether 'proved' by informal observation or by experimental research, must be regarded as a construction.

Preschoolers associate many toys, articles of clothing, tools, household items, games, occupations and even colours (pink and blue) with one sex as opposed to the other (Huston 1983; Picariello, Greenberg & Pillemer 1990). As Berk (1997, p504) explains, "[m]ost preschoolers do not yet realise that characteristics associated with sex – activities, toys, occupations, hairstyle and clothing – do not determine whether a person is male or female".

If young children have already adopted gender-appropriate behaviours of their society and culture from their interactions with family members and others, for the purpose of this inquiry, it is necessary to investigate young children's understanding about literacy in relation to their own gender.

Many studies have researched the role that gender plays in early literacy learning (Alloway 1995; Cairney & Ruge 1997; Freebody, Ludwig & Gunn 1997; Huston 1983; Makin 2005; Nichols 2002; Picariello, Greenberg & Pillemer 1990; Razey 2002) and in his studies with teenage boys, Martino (1994) reported that teenage boys viewed reading as a *'feminine'* activity and English as a *'soft'* subject. This gender difference can also be seen in subject choices of Year 7 students (Teese, Davies, Charlton & Polesol, 1995).

In a nationally funded study (Alloway 1994), across 10 sites in Queensland and NSW, that focused on children from preschool to Year 3 many issues about gender inequity emerged. These included such issues as aggressive and harassing behaviours in the playground by the boys towards the girls, and exclusionary and monopolistic practices in the home corner by the girls towards the boys. From all of the sites studied, in varying degrees, the children had already assumed highly gendered understandings of behaviours in the home and towards later work opportunities available to them. In the same study, within the children's readings and writings, boys and girls employed gendered discourses in discussing stories. While boys' talk revolved around the heroism of the male character, and within their writing, boys were usually the heroic figure. Girls focused on romance and love stories, and within their writing, they were more often the narrator rather than the central figure.

Fivush (2000) reported that mothers discuss emotion more with their daughters and use more facial expressions than they do with their sons, and mothers and fathers discuss different emotions with their children – sadness with their daughters and anger with their sons. Peterson (2001) suggested that discussion of emotions plays a

critical role in developing oral narratives and girls seem to develop oral narrative skills earlier than boys (Barnhart 1991; Wigglesworth 1997), whereas boys prefer information books to narratives (Smolkin & Donovan 2000).

Millard (2003) has also reported that there are differences in the ways that boys and girls use drawings in their written narratives while Pahl (1999) suggested that boys are disadvantaged in early childhood settings because their interest in popular culture is viewed negatively.

Nichols (2002), in her study, used semi-structured interviews with 56 middle-class, Australian families. When the parents' descriptions of their children were analysed using critical discourse analysis, three very important points emerged:

- Individualising descriptors assigned children to gendered categories.
- Literacy was associated with particular kinds of activities and dispositions.
- Choices to engage in literacy-related activities were likely to be seen as authentic when exercised by girls but inauthentic when exercised by boys

(Nichols 2002, p129).

Nichols' research supports Berk's (1997, p520) claim that "gender-appropriate behaviours begin so early in the preschool years that modelling and reinforcement must account for its initial appearance" and as represented in the table below demonstrates that parents more often describe their boys as *'physical, an outdoors person, interested in maths, sociable and independent'* whereas parents describe their girls as *'quiet, indoors person, interested in drawing, literacy and fiction, shy and dependent'.* This being true, parents' beliefs about their children's dispositions, impact on both their children's efforts and interest in literacy, and on the parents' expectations of their children's abilities. Nichols, therefore, argues that,

> parents discursively framed interpretations of children's interests and this alignment had particular implications for parents' expectations of children's orientations to literacy and schooling more generally.
>
> (Nichols 2002, p130)

The 17 families included children of both sexes and in nine of these families, a sustained comparison was carried out in the interview. Table 2.1 (overleaf)

summarises the key aspects of difference referred to by parents when comparing their opposite sex children.

Descriptors used by Parents when Comparing Opposite Sex Sibling Pairs

Please see print copy for Table 2.1

Table 2.1 Descriptors used by parents when comparing opposite sex sibling pairs (Nichols 2002, p129)

Nichols research (2002, p124) demonstrated that,

> Parents' interpretations of their young children's predispositions to literacy are significantly influenced by the child's gender. … This means that girls and boys

> enter into formal literacy already having been constituted as particular kinds of gendered literate subjects.

Furthermore, from parents' accounts of their children, literacy-related activities featured strongly in boys' perceived non-interests, while most of the girls' perceived interests were literacy related.

Razey (2002), in her study of the role of gender in the social construction of literacy, analysed the literacy interactions of six kindergarten boys and six kindergarten girls at both home and school. She found that the six focal children each contributed in a *unique* way in their home situation yet they contributed *similarly* in the school situation. The *uniqueness* of their interactions at home did not transfer to the classroom situation. Despite the complexities evidenced at home, the classroom seemed to be a linguistic leveller. Razey's study was consistent with previous studies by Cairney and Ruge (1997), and Freebody, Ludwig and Gunn (1997).

Razey's study also showed that the linguistic situation within a kindergarten classroom can be very influential on both boys and girls and, as Alloway (1995) also noted, there was a need to investigate gender issues in the early years. Alloway (1995, p19) claimed, "[e]ight's too late to be thinking about issues of gender".

Makin (2005), in her study of 32-36 month-old children involved in the SHELLS (Support at Home and Early Language and LiteracieS) research project, found that gender differences in literacy were evident at this early age.

> The main area of gender difference appears to be in girls' active choice of and participation in literacy activities. More girls are reported to be initiating reading sessions, joining in stories, initiating the turning of pages at the appropriate time, choosing to look at books alone, holding the book appropriately, making marks, and taking part in a range of everyday literacy experiences.
>
> (Makin 2005, p72).

As the research suggests, differences in gender are evident in young children and in their orientations to literacy. This difference needs to not only be acknowledged by parents, early childhood educators and policy makers but also needs to be addressed at home, within the classroom and in policy making, as learning in the

early years is widely recognised as a very important period in children's development – physical, social and cognitive.

The last section of this chapter now explores early literacy learning in an electronically mediated world.

Early Literacy Learning in an Electronically Mediated World

In an electronically mediated world, being literate also means understanding how the different modalities combine in complex ways to create meaning. People have to learn to make sense of the iconic systems evident in computer displays – with all the combinations of signs, symbols, pictures, words and sounds. Literacy is no longer viewed as simply grammar, lexicon and semantics; literacy now comprises a wider range of semiotic systems that cut across reading, writing, viewing and speaking (Cloonan 2005; Snyder 2001b; Street 2001).

Technology has changed not only the world of adults, but also the world of young children. Learning and communication have also been dramatically changed in the process. Now, for the first time in history, the written, oral and audiovisual modalities of communication are multimodal hypertext systems made accessible via the Internet and the World Wide Web (Snyder 2001a). "Children now live in an ever-changing computerised world, where text, pictures, and voice combine to offer fascinating, new learning opportunities" (Casey 2000a, p43).

Snyder (2002, p6) argues that,

> Literacy practices in the age of the new information and communication technologies are highly complex phenomena; they are not just about deciphering texts; they are also about understanding how culturally significant information is coded.

Snyder (2001a) also suggests that we need an expanded set of understandings of texts and literacy, and to recognise the literacy skills many children bring with them to school that they have developed in their out-of-school worlds.

The sophistication of young people's knowledge of out-of-school literacies is increasingly being documented (Downes 1999; Healey 2000; Moulton 2000). This

research raises questions about the implications of the mismatch between school expectations and the definitions of literacy and the kinds of knowledge young children bring to the school setting. As Casey argues, the uptake of technology use in classrooms has been slow.

> Individually innovative teachers around the world have been researching the use of computers in the classroom: however, widespread use of technology in the classroom has been extremely slow in developing.
>
> (Casey 2000b, p5)

Luke (1999), suggests that children's early literacy and play experiences are shaped increasingly by the electronic media, and Downes (2002, p184) argues that, "many kindergarten children enter school with informal competencies and predispositions for learning that have developed from the use of computer technologies in their homes". In the *Children of New Millennium Project*, Hill and Mulhearn (2007, p62), in their study of 16 diverse early childhood settings, found that "regardless of socioeconomic status or geographic location most children also had regular access to computers, or were able to access them at friends' houses or their grandparents". They also found that "in most cases the children … could use ICT far in advance of the equipment in many of the schools and preschools".

While these experiences may be happening, it seems teachers of early years children do not value these *'competencies and predispositions for learning'* very highly. Piannfetti (2001) and Green, Reid and Bigum (1998) also report that early childhood educators, themselves, feel ill-prepared and lack confidence with ICT, and also in the teaching of ICT. Wood, Willoughby and Specht (1998) found that early childhood educators held the view that computers were of great interest; however, they did not have the resources, expertise nor the software to use them effectively.

If the views of Snyder and others are to be accepted, then literacy no longer only refers to print-based material, but now also includes combinations of signs, symbols, pictures, words and sounds. Thus it seems we are doing young children a disservice by not incorporating such competencies into their early literacy education, both in the home and in schools.

As far back as 1994, in the United States the average age of children who started to use computers at home was 18-24 months (Public Broadcasting System 1994, cited

in Casey 2000b). As Casey (2000b) reports, parents support children's technology learning in the same way that they support other learning.

> Generally, parents provide the same risk-free environment for computer learning that they provide for language learning, that is, excitement about and praise for the child's curiosity, attempts, and success. Children are as fearless exploring the keyboard as they are exploring other parts of the exciting parts of their environment. Because no one has told them they cannot succeed, young children are much more willing to use and experiment with the new technology than are adult learners who, after years of failure, are reluctant to risk failure
> (Casey 2000b, p4).

The Australian Bureau of Statistics, Australian Broadcasting Authority with the Office of Film and Literature Classification, Family and Community Development Committee (2000, cited in Snyder 2002), reports on the widespread engagement of young people (5-14 years-old) with information and communication technologies in their out-of-school time. In their study of 4-8 year-olds, Hill and Mulhearn (2007, p62) also found that,

> Children went online to websites linked to television shows, used search engines to find information and played interactive games online and with game software.

There is also support from research in many scientific fields, as well as research in ethnographic studies, which confirms that technology is indeed effective in the learning of writing and reading (Casey 2000a; Cloonan 2005; Leu 2002; Snyder 2001a).

As Casey (2000a, p6) claims,

> The computer is best used as a tool to aid thinking and writing and is especially powerful when the user controls the learning.

Today, children's literacy experiences in the home are much broader than paper-based literacy materials, and include what Snyder (2002) calls *'techno-literacies'.* Downes (2002, p194) suggests that "children as young as three can use computer

technology to be creative and represent their ideas in symbols, words, sounds and images".

Other research suggests that there are benefits in using technology as a tool in literacy instruction. Technology appears to motivate children and to increase the time they are willing to spend practising important academic skills. Daiute (1983), and Morrow, Barnhart and Rooyakkers (2002) found that students exhibited a higher level of motivational engagement when using technological tools.

A case study of a six year-old, by Wollman-Bonilla (2003, p133), suggests that,

> e-mail messages foster different skills and conventions than print-based letter writing and that e-mail is becoming a pervasive form of communication that children must learn to appropriate in order to be fully literate. This only underscores the fact that metacognitive awareness of the 'rules' of different types of writing may have far-reaching significance for children's conscious mastery of the various written forms they may encounter throughout their lives.

Further to studies about early print-based literacy learning, in their out-of-school lives, even in the earliest years, children's experiences and expectations of literacy are no longer only paper-based (Sefton-Green 2001), and language is not the only important communication system. Today images, symbols, graphs, diagrams, artefacts and many other visual symbols are particularly significant. Thus, the idea of *'visual literacy'* would seem to be an important one (Gee 2003). As Sefton-Green (2001, p174) observes, "teachers need to recognise that their roles and authority have changed, and that entry into and use of literacies is a pluralistic, complex, uncontrollable part of everyday life".

Therefore, it is important that studies explore children's techno-literacy practices in the home (Snyder 2001a), and that these studies include both the print-based literacy skills and the technological skills that children bring with them to the school environment. Wepner, Valmont and Thurlow (2000) state that the responsibility of education is to prepare students for the future. Thus, in schools we need to teach our students to use technology if we want them to succeed in today's world. To this end, it is vital that educators have knowledge, and an understanding of the techno-literate practices and skills of young children and build upon these in the classroom setting (Beavis 2002). In the current education context, technology can support and enhance

the development of reading, writing and the language arts, which are the foundations for success in school and in life (Reinking 1999).

This inquiry aims to explore early literacy learning in the home and add to our understanding of the relationship between early literacy learning, socioeconomic background and gender. It also explores multiliterate practices of young children in the home in order to inform parents, teachers of young children and future policy and curriculum directions for schools.

Summary

In concluding, the research clearly indicates that enjoyable early literacy experiences in the home, pre-school and wider community, prior to school, positively affect school achievement in literacy activities in Kindergarten and in later years at school. The research also argues that high emergent literacy skills on entry to Kindergarten indicate high achievement in literacy in later years. Other studies have also more specifically listed emergent literacy skills on entry to school that indicate later success in literacy. There is evidence too, to suggest that a variety of activities related to frequent storybook reading prepare kindergarten children for success in literacy activities at school. Many other studies also conclude that the frequency of literacy related activities indicate success in literacy at school.

We understand that literacy is a socially constructed skill and that kindergarten children do not start school with equal opportunity for success. The school setting is complex and because of prior experiences, the transition from home to school will be more difficult for some children than others. For these children, success will largely depend on the teacher's ability to provide a '*bridge into school literacy'* (Cook-Gumperz 2006).

The research also suggests that differences in gender are evident in young children and in their orientations to literacy. Writers and researchers suggest many possible reasons for gender differences in literacy, and hold different views as to long term significance of gender differences. It has also been found that across 35 countries studied, girls were better readers than boys (Makin 2005).

We know that school age children are exposed to a wide range of techno-literacies out of school, and that computer based activities enhance literacy achievement.

Casey (2000b, p8) argues that,

> Used effectively as a tool to aid writing and thinking, the computer enables young children to turn their thoughts into print, which they can read, rethink, and revise. It also allows them to effectively demonstrate the literacy they own.

Young children today encounter a world with automatic teller machines, cordless telephones, pagers, remote controls, microwave ovens and computers. They hear digitised voices announcing the price of items and observe cashiers scanning bar codes directly into a cash register. On television they see footage of space shuttle launches and hear reports of orbiting space stations. They play computer games, interact with compact disc talking books or access information on the internet. … Yet, for all the sophisticated, computer-related technology encountered daily in society, young children when they step into kindergarten classrooms, are likely to encounter minimal applications of computer-related education technology (Labbo & Ash 1998).

Young children's experiences are extensive and the potential of young learners entering our schools with '*funds of knowledge*' that include techno-literacy practices is high. A major implication, therefore, for schools is to '*make ready'* (Comber 1999) and provide a learning environment that will build on this knowledge. Another implication is to take heed of Snyder's (2001a, 2001b, 2002) warning that techno-literacies need to be valued as important components of literacy learning both at home and in the school settings.

To do so, will require a change in teachers' definition of what constitutes literacy practices in the early years, for as Turbill and Murray (2006, p2) propose "teachers of early childhood continue to operate within the paradigm that literacy is a set of skills to be mastered, and technology is a tool to be used to master those skills". Turbill (2001, p256) also reported,

> a group of principals at a conference lamented that in spite of each classroom in their schools having at least one computer, teachers of the early years in particular, were reluctant, even resistant, to the integration of computers into their literacy curriculum.

Makin et al. (1999), McNaught et al. (2000) and Arthur, Beecher and Jones Diaz (2001) suggest that even the preschool experiences that involve multiliterate practices are likely to not only be ignored, but actually devalued in the school setting. If we are to acknowledge, value and build on the techno-literacy practices that kindergarten children experience in their homes and thus bring to school, it seems we must first begin with the teachers of school entry classes. While this is happening in some schools, most classroom settings are just not conducive to using computers and other technologies in teaching and learning experiences. As Murray (2000) pointed out, in some classrooms, computers are so close together that the mouse has to be operated by moving it around on top of the computer. This scenario, sadly, is common in many classrooms. Only when teachers are in a position to understand and espouse the synergy between techno-literacy practices and print-based literacies, will parents also begin to acknowledge the value of the many multiliterate practices their young children experience in the home setting.

With computers having been in school settings for over twenty years and new technologies such as iPods and iPhones playing an ever increasing role in the lives of our young children, there is still much to do in our classrooms in order to *'prepare our young children for the future'.* This inquiry explores kindergarten children's multiliterate practices in their homes. The information gained from both the initial survey and the case study children will better assist early years teachers, parents and policy makers in understanding the '*funds of knowledge'* that these children bring with them to the school setting. This, in turn, will better equip all stakeholders in preparing our young children for the literacy demands of their future world.

In the following chapter, Chapter Three, the research design and methodologies used in this inquiry will be explained and justified.

Chapter Three

Developing the Story

Chapter Three

Developing the Story

Introduction

This chapter outlines the methodology that was employed to explore the multiliterate practices of the kindergarten children in their homes. The research design drew upon multiple research methodologies. Each of these methodologies, therefore, are described and justified.

The three phases of this inquiry - the initial, immersion and mapping phase - are explained separately. The description of the initial and immersion phases includes participants, data collection procedures and analysis tools and techniques. The socioeconomic background of the three schools participating in the study is established, and a description of each of the school locations is included. The gender of the participants is also noted. The mapping phase involves an analysis of New South Wales (NSW) Board of Studies (BOS) and Department of Education and Training (DET) documents relevant to this inquiry, therefore, a section on document analysis is included. Limitations of the inquiry and ethical considerations are outlined.

This study aimed to answer the following research questions:

- What are the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools?
    - What is the relationship between these multiliterate practices and socioeconomic background?
    - What is the relationship between these multiliterate practices and gender?

- How do the multiliterate practices and skills of these kindergarten children relate to the expectations, in the first year at school, of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET)?

Research Design

The research design was a qualitative study using survey, interview and participant observation. It drew upon multiple research methodologies of ethnography, case study and narrative inquiry. The research design had three distinct and separate research phases (as shown in Figure 3.1):

- Initial Phase: Survey using written questionnaires;
- Immersion Phase: Case Studies using interviews, observations and assessments; and,
- Mapping Phase: An analysis of relevant documents

The Research Design

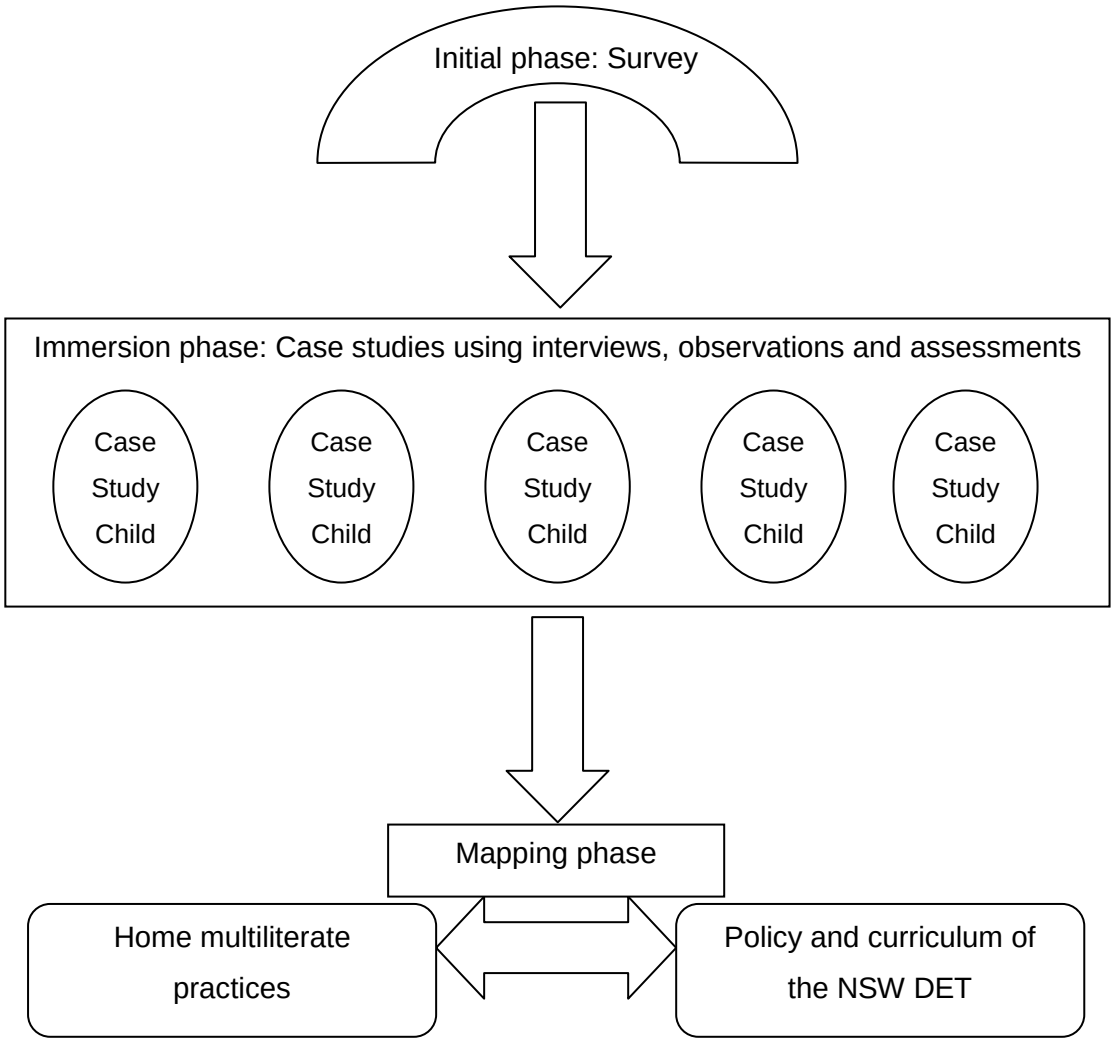


Figure 3.1 The research design

Why qualitative research?

Research is a systematic investigation that aims to find answers to problems. Research scientists agree that despite the long tradition of the objective scientific methods of quantitative research, that not all reality can be subsumed within numerical classification, and that a naturalistic approach to research emphasising the importance of subjective experiences of individuals is needed. This naturalistic, phenomenological mode of inquiry falls within qualitative approaches to research inquiry. Qualitative research, as Glesne (1999) states, seeks to understand rather than to quantify. In seeking understanding, information is often discovered that may not have been planned in the initial stages of the inquiry, but notwithstanding, this information adds depth to, and embellishes the original inquiry with a richness of data. The researcher cannot be certain of which path the research will take, or where that path will take the researcher.

Glesne (1999) notes that each small step along the path, that is, each part of the inquiry adds information to the research; sometimes confirming past knowledge or experiences and at other times opening up new knowledge and understandings, but, either way, contributing to the researcher's understanding of his/her own research and of him/herself. As Glesne (1999, p199) states,

> Each step, no matter how small, contributes to understanding…Qualitative enquiry is a search that leads into others' lives, your discipline, your practice, and yourself. You cannot be sure of what you will find, but you invariably get caught up in the search and make steps forward.

This inquiry involved visits to the homes of the case study children. These were not scripted. Rather, these visits unfolded in different ways for each child and home setting, and the researcher had to be perceptive of, and 'in tune' with the child's mood. Often data collected were different from what was intended by the researcher prior to arrival in the child's home. Nonetheless, these data contributed to the study's overall data and helped to build a larger picture of literacy learning in the home.

Research Methodologies of an Ethnographic Approach, Case Study and Narrative Inquiry

Relationship Among Multiple Methodologies as Used in this Study

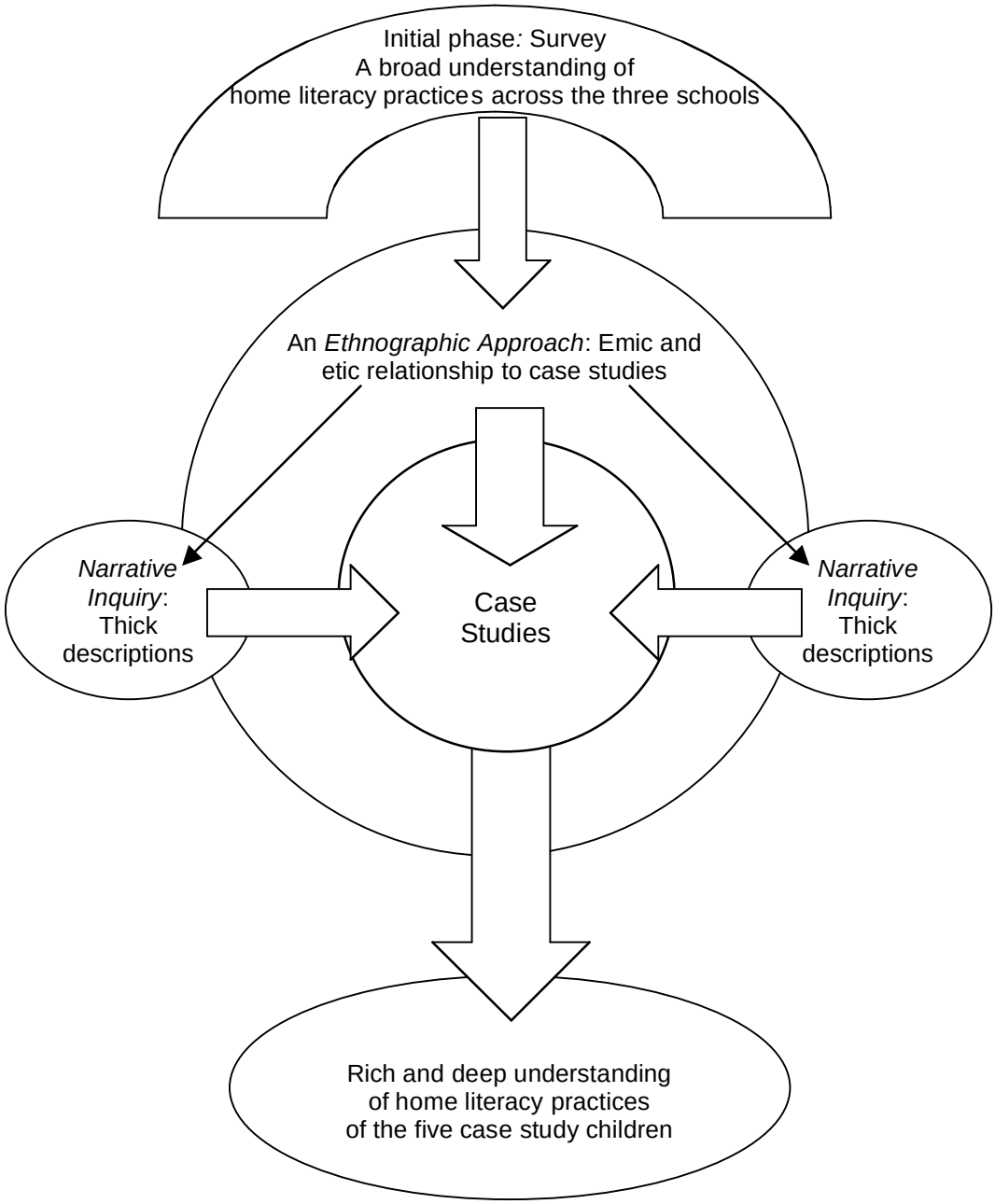


Figure 3.2 Relationship among multiple methodologies as used in this study

An ethnographic approach

This inquiry employed principles of ethnographic research. Ethnographic research is characterised by: holistic and detailed methods of naturalistic group observation in

intact settings; the integration of the researcher in the group being studied; logical analysis of verbal data within the context in which the data are gathered; and, the development of thick descriptions of events (Charles & Mertler 2002). Further, ethnography focuses on participants' beliefs, and endeavours to understand these practices and beliefs from within the group, home, institution, culture or community, while also developing an understanding of these practices from an *'outsider's'* perspective:

> Ethnography can be defined as a research method designed to describe and analyse practices and beliefs of cultures and communities… The focus of ethnography is to understand the culture from an emic (insider) and etic (outsider) perspective.
>
> (Mertens 1998, p164-165)

Ethnographic principles were used to understand the kindergarten children's home backgrounds and to delve into their literacy practices at home, in an effort to provide a rich and complete picture of events, and to give the '*thick descriptions'* (Geertz 1973) that are required to tell these children's stories. Thick description is Geertz's term for *'emic'* or insider interpretations. Stake (1995) also describes '*thick description'* as the interpretations of the people that are most knowledgeable about the *'case'.* The survey in the initial phase gave a broad picture of home literacy practices at the three schools in this inquiry. However, '*thick descriptions'* of these home literacy practices were only developed through multiple home visits, where semi-structured interviews and continuing participant observations allowed the researcher to develop a deep understanding of the children's literacy learning.

In the study's immersion phase, the researcher became one of the group in each of the participating children's homes, so, in essence, became one of the family. The relationship between the researcher and the case study families, and in particular, the case study children built up throughout the time-frame of the inquiry was one of '*emic'* insider. The researcher made six to eight visits to each child's home, with each visit ranging from one to one-and-a-half hours. Visits were made over a period of six months. During these visits many semi-structured and informal interviews were held with the parents and the children. Non-participant and participant observations were also made and audio-tapes were recorded.

In an ethnographic approach, it is also important for the researcher to be aware of interview dynamics and the possibility of power imbalance. Interviewees' feelings of power imbalance may result in problems with data validity. Power imbalance can occur between the interviewer and interviewee from perspectives of gender, ethnic background, disability, socioeconomic status or previous experience (Alasuutari 1995; May 1997; Tewksbury & Gagne 2001). If an interviewee does not feel *'equal'* with the interviewer, then there is a possibility that the interviewee will make comments and give answers that he/she thinks the interviewer wants. This is why it is so important that the researcher, or interviewer, takes the time to become accepted so that the interviewee also sees the researcher as an '*emic',* an '*insider'.*

Relationships developed at the first visit with the parents, and at the first visit with the case study children were crucial to the success of this inquiry. The first visit with the parents was held during school hours when the case study children were not at home. This allowed the researcher time to build rapport with the parents but also time to discuss the case study children without their knowledge. This visit also gave parents opportunity to discuss any concerns; the time to feel comfortable with the researcher; and a chance to withdraw from the project if they wished, prior to any contact with their children.

During the first visit with the children, both the interviewer and the children built the framework for future visits. It was paramount that the children developed trust in the interviewer. The interviewer was able to build up trust with the children by using information previously supplied by the parents, by taking an interest in children's activities and friends, and by answering children's questions in an honest and open way.

Equally as important is that the researcher remains an *'etic'* or *'outsider'* so that perspective on the cases is not lost. Being a part of the group, collecting data and developing an understanding of events from the *'inside'* should not cloud events viewed from a broader perspective. As noted by Burns (1995, p269), the 'natural setting' can never be exactly the same as 'a setting with a researcher present'. Remaining an *'etic'* throughout several home visits was not easy as the interviewer became more and more accepted and began to feel '*one of the group'*. The interviewer's life was a part of the case study families' lives and their lives became a part of the interviewer's life. To counteract this '*emic'* effect, after each visit, data

needed to be reviewed and analysed objectively as described later in this chapter but then reviewed again at a later date to ensure there was no bias by the interviewer.

As Burns (1995, p249) states,

> The following general commitments or orientations of an ethnographic approach include:
>
> - The problem of understanding social action (understanding and interpretation).
> - The emphasis on process (process).
> - The investigation of 'natural' settings (naturalism).
> - The study of social phenomena (holism).
> - The assumption that there are always multiple perspectives (multiple perspectives).
> - The use of multiple techniques, with emphasis on participant observation and interviewing.

Table 3.1 (overleaf) relates the above orientations to this inquiry.

Orientations of an Ethnographic Approach

Orientation	*Relationship of Orientation in this Inquiry*
Understanding social action	How does each family member in this case study interact with each other? What knowledge do the family players bring to literacy learning in the home? What are the home routines? What do the family members value in their daily lives?
Process	How does the interviewer interpret the different situations that occur during each home visit? There are multiple ways of defining social interactions and more specifically of defining literacy learning.
'Natural' settings	It was important, in order to gain understanding about the child's home literacy learning, that the interviewer observed and participated with the child in the natural setting, the child's home. To remove the child from the home would destroy the very nature of what the interviewer was trying to capture and understand.
Social phenomena (holism)	The child's home literacy learning developed in the context of the culture of the home, in the milieu of the family's values and beliefs. The child's learning could not be understood apart from the home and the family.
Multiple perspectives	There is often a difference between what people say they do, and what they actually do. They have very different perspectives and understandings about different phenomena. People have very differing views, and in this inquiry differing views as to what constitutes literacy practices. Their interpretations are based on their experiences and naturally everyone has very different experiences. The interviewer was able to become immersed in the lives of the case study children and their families and was therefore able to better describe, understand and interpret the children's home literacy practices
Multiple techniques: Participant observation and interviewing	Multiple techniques are used in ethnography to collect data. In this inquiry, the interviewer employed semi-structured interviews with parents and the children and participant observations. The findings from the initial survey were also used to supplement and check on collected data from the interviews and observations.

Table 3.1 Orientations of an ethnographic approach

Burns (1995) also explains that collecting ethnographic data follows a research cycle as described below. After collecting data from the initial survey, and collecting broad descriptive observations, the interviewer made more focused observations. By using participant observation techniques, the interviewer collected ethnographic data about the case study children's home literacy practices. Through data analysis and repeated observations, investigations narrowed and became more focused. These selective observations used semi-structured interviews to gather the information needed.

The Research Cycle in Ethnography

Please see print copy for Figure 3.3

Figure 3.3 The research cycle in ethnography
(Burns 1995, p253)

Case study

In-depth case studies describe a small number of cases, and while making no claims that these cases represent, or can be generalised to a total population, they have been shown to be of great strength in the field of early childhood literacy, for example studies by Heath (1983), Campbell (1999), Gregory and Williams (2000) and Brooker (2002). The effectiveness of case studies, like that of most qualitative research, lies

in what Guba and Lincoln (1989) would call their *'trustworthiness'*, rather than on the claims to reliability and validity associated with larger samples. In this inquiry, the researcher became one of the group (family) through multiple home visits. A bond of *'openness'* was developed between the family members and the researcher and this bond ensured situations of power imbalance did not arise. The interviewees (parents and children) developed feelings of trust in the interviewer and, therefore, data collected were more likely to be '*trustworthy'*.

As cited in Mertens (1998), Langenbach, Vaughn and Agaard (1994) and Tesch (1990) view the case study as,

> one type of ethnographic research that involves intensive and detailed study of one individual or of a group as an entity, through observations, self-reports, and any other means.
>
> (Mertens 1998, p166)

Stake (1995) has said that case studies draw from naturalistic, holistic, ethnographic, phenomenological and biographic research methods. He uses the criterion that case study research is not defined by a specific methodology but by the object of study. Stake (1995, p133) believes that,

> a case is a special something to be studied, a student, a classroom, a committee, a program, perhaps, but not a problem, a relationship or a theme. The case to be studied probably has problems, a relationship or a theme, but the case is an entity.

In this inquiry, each focal child's home literacy practices is a *'case'*, something special and bounded to be studied.

A narrative inquiry approach was also used in this inquiry to tell the children's *'stories'* of their home literacy practices. As detailed below in the following section outlining narrative inquiry as a research methodology, narrative inquiry was the most appropriate method of data analysis and report.

Narrative inquiry

As narrative inquiry aims to understand and make meaning of experience, this methodology was employed to report on findings of interviews with case study children and their parents, as well as findings of non-participant and participant observation of the case study children.

Narrative and story have long been regarded as an intellectual resource in the arts, where they have been used to describe and interpret experiences of human beings down through the centuries (Beattie 2000). Narrative and story are closely related terms that are increasingly becoming linked with ideas about the nature of human experience and how experience may be studied. The term *'narrative'* can be broadly defined as an oral or written story, or even a visual story. It may briefly encapsulate a particular event; it may be presented as an extended story that involves an aspect of one's experience, or it may be an account of one's entire life.

Riessman (2004) discusses narrative in terms of case-centred research and category-centred research. She suggests that ethnographers typically use a case-centred approach as they work with a particular group, community or organisation. Category-centred research, on the other hand, has as its goal the generation of categories across subjects or participants.

Narrative is also seen as having both space and direction, and each of these dimensions – *inward, outward, backward, forward,* and *situated within place* need to be explored (Clandinin & Connelly 2000). These dimensions were employed in this inquiry as the stories of the children's multiliterate practices unfolded. While collecting data, the interviewer is looking *'outward'* and through reflection (*looking inward*), the interviewer makes sense of the data. As the inquiry moves *'forward'* in time, the interviewer checks the reliability of the data by moving *'backward'* and checking against previous data. Each of these dimensions are also '*situated within place',* within the context of the inquiry; in this inquiry the context is the children's homes.

Field texts are an important data collection procedure in many qualitative research methodologies like ethnography, case study and narrative inquiry. Field texts aid the inquirer to move back and forth between full involvement with participants, as well as distance from them. Field texts aid the memory of the inquirer, and fill in the richness and intricacy of the lived stories, and the events. It is in these texts - the composition

and the analysis of these texts - that thick description, depth and complexity is developed. The field texts and audio-tapes recorded in the children's homes about the focal children's multiliterate practices have been transcribed into rich narratives of shared experiences. These narratives provide the reader with an explicit and deep picture of events about each of the cases studied.

> When narrative inquirers are in the field, they are never there as disembodied recorders of someone else's experience. They too are having an experience, the experience of the inquiry that entails the experience they set out to explore.
>
> (Clandinin & Connelly 2000, p81)

Four different models of narrative analysis that may be useful for interpreting personal narratives have been outlined by Riessman (2004). Although they are listed separately, aspects of one often overlap with the other.

- Thematic analysis has a focus on 'what' is said rather than 'how' it is said. It is suitable to individual and comparative case work. Common thematic elements may be identified across the participants and the events they report.
- Structural analysis has its focus on the 'way' a story is told. The focus is on the form and on a micro-analysis of the language that has been used.
- Interactional analysis emphasises the dialogic process between the storyteller and the listener. Theme and structure are important, but the focus is on the storytelling as a process of co-construction in which both parties construct meaning collaboratively.
- Performative analysis goes beyond the spoken word as storytelling is seen as performance. Researchers may analyse the oral narrative of actors, story setting and audience response.

(Riessman 2004, p706)

In this inquiry, a thematic analysis was employed to identify common thematic elements across both the participants (the case-study children and their families) and the events (their multiliterate practices).

Bruner (1986) has explained that we construct ourselves through narrative and make sense of our lives by telling stories of our lives. Building ethnographic case study and

narrative inquiry methodologies together allowed the researcher to construct the story of each of the kindergarten children's lives, their learning and in particular their multiliterate practices in their homes. This next section will outline the initial phase of the inquiry; survey using written questionnaires.

Initial Phase: Survey using written questionnaires

Site and participants

In total, 123 questionnaires (Appendix A) were distributed to the parents of kindergarten children at three Sydney metropolitan schools - Schools 1, 2 and 3. There were 65 questionnaires returned; a return rate of 53%. The percentage of questionnaires returned from the specific groups - boys and girls at each of Schools 1, 2 and 3 was over 50%, except for the group of girls at School 2 (26%), and the group of boys at School 3 (36%). The returned number of questionnaires for both of these groups was small with 5 and 4 respectively.

The following table outlines the number of questionnaires distributed and the number of questionnaires returned from the group of boys and girls at the respective schools.

Distribution and Return Rate of Questionnaires

	School 1		*School 2*		*School 3*		*Totals*		
Gender	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	*Total*
Questionnaires distributed	31	29	21	19	11	12	63	60	*123*
Questionnaires returned	17	19	11	5	4	9	32	33	*65*
% returned*	55	66	52	26	36	75	51	55	*53*

*All percentages given are rounded to the nearest whole percentage

Table 3.2 Distribution and return rate of questionnaires

Establishing socioeconomic background of the three schools

Information from the Australian Bureau of Statistics Census of Population and Housing (ABS) (2006) was used to establish a reliable and valid understanding of the socioeconomic background of the three schools involved in the study and to confirm the researcher's impressions of the three schools after years of living and working in the area.

The information from the Australian Bureau of Statistics Census (ABS) (2006) is set out in the table below. Statistics from the 2006 census for both New South Wales and Sydney have been included in the table to establish a benchmark by which to measure the information in relation to the three schools.

Australian Bureau of Statistics: Census 2006

Please see print copy for Table 3.3

Table 3.3: Australian Bureau of Statistics: Census 2006 (ABS 2006)

The three schools were situated in the Sydney metropolitan area.

School No. 1 was situated in a quiet area away from main highways and consisted mainly of large, expensive, private, separate homes; many of which were set amongst the bushland with views of the bay. A couple of blocks of townhouses and villas had been developed over recent years to accommodate couples with children no longer living at home. There was no rail access. Within this suburb, there were two corner stores, a small shop near the bay, a yacht club, a park land and the local, public primary school.

Percentages of indigenous persons and persons born overseas were well below both NSW and Sydney norms. The indigenous population of 0.3% was seven times less the NSW figure of 2.1%, and below a third of Sydney's figure of 1.1%. Persons born overseas accounted for only 12.9% of the population compared to NSW figures of 23.8% and Sydney of 31.7%.

Figures for English being the only language spoken at home at 88.5% was higher than NSW at 74% and Sydney at 64%. Persons living in private separate dwellings accounted for 90.8% of the population compared to 69.7% for the state and 61.7% for Sydney. One parent families accounted for only 8.8% of the population which was around half the percentage for NSW (16.1%) and Sydney (15.6%). The median weekly family income was $1,833 which was higher than the NSW median weekly family income of $1,181 and Sydney of $1,350. The percentage of persons who had completed Year 12 or the equivalent was 48.4% which was higher than NSW figures of 42.36% but lower than Sydney figures of 49.13%.

Census (ABS 2006) figures confirmed a high socioeconomic population.

School No. 2 was situated in a busy semi-industrial suburb with a major highway separating industries, shops, private homes and blocks of units. Strip development lined both sides of the highway. There was an established shopping area in one of the main adjoining streets, and sporting fields adjacent to the highway. There was a rail link to the inner city. The suburb's primary and high school are both public schools. Private homes were mainly well established, small and modest. There were both well established blocks of units and new developments.

Percentages of indigenous persons and persons born overseas were below both NSW and Sydney norms. The indigenous population of 1.0% was half the NSW figure of 2.1%, and comparable with Sydney's figure of 1.1%. Persons born overseas accounted for only 15.7% of the population compared to NSW figures of 23.8% and Sydney of 31.7%.

Figures for English being the only language spoken at home at 88.0% was higher than NSW at 74% and Sydney at 64%. Persons living in private separate dwellings accounted for 88% of the population compared to 69.7% for the state and 61.7% for Sydney. One parent families accounted for 15.5% of the population which was comparable with percentages for NSW (16.1%) and Sydney (15.6%). The median weekly family income was $1,434 which was higher than the NSW median weekly family income of $1,181 and Sydney of $1,350. The percentage of persons who had completed Year 12 or the equivalent was 43.97% which was higher than NSW figures of 42.36% but lower than Sydney figures of 49.13%.

Census (ABS 2006) figures confirmed a socioeconomic population that was relatively comparable with NSW and Sydney median figures on many of the criterion. This population at School No. 2 was not as high a socioeconomic population as School No. 1.

School No. 3 was situated in a busy suburb providing the major business facilities for surrounding suburbs, a shopping area including restaurants, an entertainment centre, a library, council buildings, major sporting complexes, a private school and two primary schools. One of these primary schools catered for students with special learning needs. The suburb also provided a major rail link for commuters travelling to the inner city for work and, therefore, there were numerous well-established blocks of units and flats and many new unit and town-house developments. Family homes were small, modest and well-established.

The percentages of indigenous persons (1.2%) was about half the NSW figure of 2.1% and comparable with the Sydney figure of 1.1%. Persons born overseas accounted for 21.1% of the population which was less than NSW figures of 23.8% and Sydney of 31.7%. Figures for English being the only language spoken at home at 81.5% was higher than NSW at 74% and Sydney at 64%. Persons living in private separate dwellings accounted for 27% of the population compared to 69.7% for the state and 61.7% for Sydney. This figure was just over a third compared to figures for

the state and less than half of the figures for Sydney. One parent families accounted for 19.4% of the population which was higher than percentages for NSW (16.1%) and Sydney (15.6%). The median weekly family income was $1,449 which was higher than the NSW median weekly family income of $1,181 and Sydney of $1,350. The percentage of persons who had completed Year 12 or the equivalent was 48.63% which was higher than NSW figures of 42.36% but lower than Sydney figures of 49.13%.

Census (ABS 2006) figures confirmed a socioeconomic population relatively comparable on some criteria with other areas of NSW, Sydney and School 2 but with a far higher percentage of persons living in dwellings other than separate houses and a higher percentage of one parent families.

In comparing the three schools in this study using the census information, School 1 was situated in a high socioeconomic area, with Schools 2 and 3, being situated in lower socioeconomic areas than School 1.

Establishing gender

In the questionnaire, parents of the kindergarten children were asked to identify the gender of their children. All parents who returned the questionnaires had identified whether their children were boys or girls. There were 51% of the boys' questionnaires returned with 55% of the girls' questionnaires returned.

Of the returned questionnaires, two sample sizes were small. Only 26% of parents of girls from School 2 returned the questionnaires and 36% of parents of boys from School 3 returned the questionnaires. These results were previously outlined in this chapter in Table 3.3.

Data collection procedures

Data collection of the initial phase included survey research methods using written questionnaires. This technique with details of the written questionnaire is discussed below.

Survey research

Surveys allow collection of data from a larger number of people than is generally possible when using other qualitative research methods. The researcher has a choice between simple descriptive, cross-sectional or longitudinal approaches. Surveys can be mail, telephone, personal interviews, e-mail or a combination of these.

This survey was a simple descriptive, mail survey. As Mertens (1998, p108) describes "the simple descriptive approach is a one-shot survey for the purpose of describing the characteristics of a sample at one point in time". There are several limitations to surveys, in particular mail and e-mail surveys. These limitations are addressed later in this chapter. Nonetheless, the survey provided a broad understanding of kindergarten children's home literacy practices at the three selected schools.

Czaja and Blair (1996, p13) advise that specific goals of a survey need to be established based on the research goals. They explain that survey goals test a hypothesis, test a causal model that suggests a series of interrelated hypotheses or estimate the proportion of people who hold a certain belief or who engage in a specific behaviour.

The purpose or goal of this survey was to establish the proportion of people (kindergarten parents) who held certain beliefs about literacy learning and who engaged in specific literacy behaviours in the home.

Parents of 123 kindergarten children from three Sydney metropolitan schools were surveyed using an extensive questionnaire of multiliterate practices (Appendix A). The survey questions were based on previous research cited in the literature review and were specifically designed to capture aspects of social realities of respondents and provide a backdrop to the visits to children's homes. The data collected from the surveys was never intended to be used for statistical purposes. It is important that the researcher develops a holistic understanding of the phenomena being studied, therefore, the initial survey was designed to provide the researcher with a broad picture of kindergarten children's home multiliterate practices. This broad picture set the educational backdrop for the in-depth information gained from the subsequent case studies. In this initial phase of the inquiry, parents were anonymous. Anonymity

meant that data were more likely to be accurate as then parents would not feel that their practices with their children in the home were being judged.

In the initial phase of the inquiry, colour coded questionnaires (Appendix A) and parent information sheets (Appendix B) were sent to the parents or carers of kindergarten children from three Sydney metropolitan primary schools. The questionnaires were colour coded to enable the researcher to identify the respective schools on return of the questionnaires.

Participation was voluntary and anonymous. Parents were asked to identify the age and gender of their kindergarten children and they were also given the option to participate in later stages of the research as case study parents.

The researcher presented an information session about the research at the *'Meet the Teacher'* nights held at the beginning of the year for kindergarten parents at the respective schools. The principals at the respective schools endorsed the value of completing the questionnaires and supported the conducting of the research in their schools.

This personal contact was an important factor in the return rate of the questionnaire (53%) for the following reasons:

- The researcher was not a stranger to the school, the principal or the parents;
- Parents felt confident because the principal supported the researcher and the research;
- The research title, questions, methodology, questionnaires and case studies were outlined;
- Parents recognised the benefits of the research to the school;
- Parents had prior knowledge of the questionnaire before it was sent home;
- Parents understood the commitment if they nominated to participate in a case study; and,
- Parents had the opportunity to ask any questions.

The questionnaire was then circulated to the parents or carers via the kindergarten teachers in the respective schools. Included with the parent information sheet and questionnaire was a self-nomination form for participation as a case study parent

(Appendix C) and a stamped, addressed, return envelope. At this initial stage there was no individual face-to-face contact apart from at the *'Meet the Teacher'* nights. Principals of the participating schools were also supplied with information for their newsletters in relation to the survey, and with a follow-up reminder for parents (Appendix D).

The children's ages ranged from 4 years, 6 months to 5 years, 11 months at the beginning of their first year at school.

The study of the parents included two parent, single parent and extended families, living in private or rented homes, units, townhouses and flats. Most families lived within five kilometres of the schools.

There were eleven questions in the questionnaire with several of the questions eg. '*Storybook reading',* having multiple parts to the question**.** For Questions 1, 2, 5, 6, 7, 9 and 11, parents indicated their responses on the following scale – Never, Seldom, Sometimes, Often and Very Often. In the analysis of the data, all tables and graphs for these questions have been compiled using '*often'* and '*very often'* responses together.

Many of the questions in the questionnaire required multiple responses. For example in Question 1, '*Storybook reading'*, parents were asked whether or not they participated in other activities while reading to their children. They were then asked to indicate the activities they participated in. Many parents responded that they participated in all of the five listed activities. When reporting on all multiple responses, the graphs indicate the total percentage of parents participating in that activity separate from the other four activities. The percentages for all of the five activities, therefore, do not total one hundred percent. For example:

- A total of 50% of parents discussed the pictures with their children;
- A total of 45% of parents discussed the meanings of words with their children;
- A total of 31% of parents focused on the words when they read to their children;
- A total of 47% of parents focused on the letters in the words when they read to their children; and,
- A total of 24% of parents discussed rhyme when they read to their children.

The responses to Question 1 '*Storybook reading'* and Question 11 *'Technology experiences'* have been reported in multiple tables and graphs to highlight differences in the results among the three schools and differences between gender responses.

Data analysis

When the questionnaires were distributed to the three schools, they were colour-coded so that when returned, the researcher would be able to identify the source school.

All numerical data from the questionnaires were entered into an EXCEL spreadsheet and scores and percentages of the specific groups (Schools 1, 2 and 3, and boys and girls) were calculated. Several graphs were developed for most questions focusing on:

- the three individual schools;
- the three schools and gender combined; and
- gender alone.

Parents were also asked to comment on various questions in the questionnaire and these were recorded.

In Question 11, parents were asked, *'What are your views on the value of technology in learning to read and write?'* In this question, these comments were recorded separately for each school and were categorised according to the children's gender and also according to whether or not the parents' views were supportive or unsupportive of the value of technology in learning to read and write.

In the analysis of the data, comparisons and differences in home multiliterate practices among schools (background) and in relation to gender were reported and discussed. These findings and discussions are included in Chapters Five and Seven.

The results of the questionnaire provided a context of home literacy practices in which to discuss the findings from the case study children. The next phase of the inquiry, the immersion phase; case studies using interviews, observations and assessments will be outlined in the following section.

Immersion Phase: Case studies using interviews, observations and assessments

Participants

> Most research situations are too vast to interview everyone or to observe everything, … (therefore) a selection strategy needs to be devised by which to choose events, times and people.
>
> (Glesne & Peshkin 1992, p24)

In the immersion phase of this inquiry, the participants were seven case study children and their families from the above schools. All participants in the immersion phase self-nominated to participate in this inquiry. Four case study children (three boys and one girl) were from School 1; two case study children (one boy and one girl) were from School 2 and one case study child (a girl) was from School 3.

Because two focus areas of this inquiry were socioeconomic background and gender, case study children needed to be from each of the schools and there also needed to be a combination of boys and girls in the inquiry. Data were collected from all case study families, however, for the purpose of this inquiry, data from only five of the seven case-study families were analysed and reported. The data from one boy and one girl from School 1 were not included in the final study as neither of these two case studies added further data to the inquiry. Visits to these children's homes were interrupted by family holidays and other family commitments and, therefore, less data were collected. The following is a summary of each of the selected case study children and their families. These selected focal children provided a balance of background and gender.

An Overview of the Case Study Children and their Families

Case study no.	*Child's name*	*Gender*	*Family members living at home*	*Housing*	*Age in May 2005*	*School attended*
1.	Alice	girl	mother father	Home	5 years 3 months	2
2.	Adam	boy	mother father younger sister	Unit	5 years 7 months	2
3.	Alexandra	girl	mother father older brother younger brother younger twin sisters	Home	5 years 3 months	3
4.	Winton	boy	mother father older sister	Home	5 years 2 months	1
5.	Jacob	boy	mother father younger sister	Home: grandparents live at back of block	6 years	1

Table 3.4 An overview of the case study children and their families

Data collection procedures

Data collection of the home visits in the immersion phase included interviews, observations and assessments. Home visits were also audio-taped. Interview and observation techniques and assessments are discussed below.

Interviews

Interviews explore individual's understanding and experiences and can be structured, semi-structured or unstructured (informal). As the researcher builds rapport with the participants and as multiple interviews evolve, so does the quality and the richness of the information gathered. The researcher designs and redesigns the interview

structure as the interviews proceed. “Interviews yield rich insights into people’s experiences, opinions, aspirations, attitudes and feelings” (May 1997, p109).

The interviews with both the case study parents and with their children were semi-structured and informal. In a semi-structured interview, questions are normally specified but the interviewer is free to probe beyond the set questions to discover more information. The interviewer “can seek both clarification and elaboration of the answers given” (May 1997, p111). These interviews provide a much richer source of information than the structured interview but still provide a greater structure for comparability over that of the unstructured interview.

It is, however, of utmost importance that the interviewer has built rapport with the interviewee and has an ‘*entrée’* into the interviewee’s world. By asking the parents and their children to talk about their lives within the structure of specific questions, the researcher will be able to generate empirical data about their social worlds. As Holstein and Gubrium (2004, p141) state, “meaning is not merely elicited by apt questioning, nor simply transported through respondent replies; it is actively and communicatively assembled in the interview encounter”.

The unstructured (informal) interview is shaped by the process of the interview itself and not by overly constrained or narrowly defined questions. “Thus flexibility and the discovery of meaning, rather than standardisation, or a concern to compare through constraining replies by a set interview schedule, characterise this method” (May 1997, p113). This method provides a greater depth of information and a greater understanding of the subject’s point of view. The unstructured interview, like the other two types of interview, still require great skill by the researcher, otherwise the interview will not be fruitful.

As May (1997, p114) states,

> All types of interview require the interviewer to have the ability to listen well, with the semi-structured and unstructured interview requiring the interviewer to also be able to probe and paraphrase while being relaxed enough to engage with what the interviewee is saying.

In this inquiry, there were two semi-structured interviews including:

- Focused Interview with Child’s Parents (Appendix F)

- Technology Interview with Child (Appendix G).

The researcher used the focused interview at the first meeting with the child's parents. This first meeting was pivotal to the success of the inquiry; the researcher had to build up rapport with the child's parents, develop feelings of trust in both the researcher and the research per se and gather information about the child's birth, health and early development. The researcher discussed details from the initial questionnaire to establish a deeper understanding of the parents' responses. The researcher also gathered data in relation to the child's multiliterate practices at home. A transcript segment of this focused interview with the parents of Case study 1 is documented below (overleaf):

Transcript Segment from 'Focused Interview with Child's Parents'
Case Study 1

Transcript Key - R: Researcher P: Parent
Family background information (home, work, siblings, significant others, leisure activities)
R: Have you always lived here? P: We moved to this address before Alice's birth. R: So Alice has always lived in this home? P: Yes, apart from when I went back to work when Alice was two and half years old and then Alice went to stay with her maternal grandmother. R: But she still came home at night to sleep, didn't she? P: Yes mostly, unless we were going out that night and then she would stay with her grandmother.
Child's background information (birth, position in family, health/special needs, experiences prior to school, favourite activities)
R: Did Alice have any birth difficulties or does she have any special health needs? P: She has a 'blond retina' but otherwise completely healthy and she had a normal birth. R: Are there any other children in the family? P: Only a half brother who is twenty one years old. R: Does he still live at home? P: When Alice was born, he was finishing high school and then he moved away from home but Alice sees him often. R: Did Alice attend pre-school? P: She went to pre-school for two days each week from three years of age and then three days each week from four years of age. R: Did Alice settle easily and enjoy pre-school? P: The coordinator was an Early Childhood Educator and Alice had great experiences at pre-school and always loved going. There was a real focus on reading.
Influence of technology in the home:
R: Does Alice use any technology at home? P: She has her own CD player and loves making up her own dances to the music. She is always making up dances. She also watches several DVDs like 'Oliver, Les Miserables, Sound of Music'. R: So Alice enjoys music? P: Yes, as her father plays the guitar and gives tuition in guitar playing, we always have a lot of music in the home. R: What about the computer? P: Alice has several educational games that she enjoys playing with and she tries to type her name on the computer.

Table 3.5 Transcript segment from 'Focused Interview with Child's Parents' Case Study 1

The technology interview with the children was held during one of the home visits when the researcher needed to gather and document specific information in relation to technology use at home and at school. A segment of this focused interview is documented below:

Transcript Segment from 'Focused Technology Interview with Child'
Case Study 2

Transcript Key - R: Researcher C: Child
R: What do you like doing at home? C: Playing with daddy at the weekend, a card game called 'Trek', air hockey, watching TV, jig-saws, playing with my sister and the kids downstairs and playing with my cars.
R: What do you like doing at school? C: Making decisions about what to do with my friends, computer lessons a little bit, reading in class, both the whole class and by myself, maths.
R: Do you use the computer at home? C: Yes R: How often? C: Sometimes R: Does anyone help you? C: Yes, dad does. R: What do you do on the computer at home? C: I usually go on the internet and write silly words, my name and my sister's name. R: Have you ever printed anything before that you have done on the computer? C: No, today with you is the first printing I have ever done. R: Do you print anything at school? C: No, not yet.

Table 3.6 Transcript segment from 'Focused Technology Interview with Child' Case Study 2

The transcripts were shown to the parents and were discussed with the children for some '*member checking'* (Guba & Lincoln 1981; Miles & Huberman 1994). This enabled the participants to give feedback and also to ensure that the transcripts were a true reflection of the interactions that took place.

An analysis of the transcripts is included in Chapter Six.

Observations

The kindergarten children were observed in their homes as they engaged in multiliterate practices, using participant and non-participant observation techniques of ethnographic research. These sessions were also audio-taped.

Participant and non-participant observations are the primary techniques used by ethnographers to gain access to data. Perhaps the greatest asset of observational techniques is that they make it possible to record behaviour as it occurs. Bogdan and Biklen (1992, p84) refer to this as 'capturing a slice of life'. Such observations provide a basis for in-depth case studies of each of the participants, as well as of the participants as a group or a whole. Spending time with the participants in a variety of settings provides the researcher with a broader understanding of participants' reactions and behaviours in specific situations. Establishing rapport or good social relations is the most central aspect of successful participant and non-participant observation.

> The ease with which a researcher establishes relationships with members of a group depends to a large extent on the nature of the group and the skills of the researcher.
>
> (Frankfort-Nachmias & Nachmias 1996, p288)

Over a period of several months, each case study child was visited six to eight times for approximately an hour and a half each visit. As the children all attended school, these visits occurred from approximately 4.00pm–5.30pm on designated afternoons. This allowed the children time to return from school and enjoy some free time prior to the case study visits. For most of the children, though, these visits were something that they looked forward to and the visits became a part of their *'world'.* The following quotes are examples of the field texts recorded during some of the home visits.

> Alice ran down the driveway to greet me as I parked the car outside her house. She was excited to tell me she had received an award at school. Alice's mother told me Alice had been waiting for me to arrive.
>
> (Case study child 1, Home visit: 11 May 2005)

> Adam came out into the hallway to greet me and excitedly said, 'Do you want to see how I go on the internet? It is the thing with the big 'e' on it.' Adam had already turned on his father's laptop ready for my visit.
>
> (Case study child 2, Home visit: 9 June 2005)

> Alexandra opened the door and said, 'My big brother said I am lucky because I have a 'special teacher' and he wants to know why he doesn't have a 'special teacher' too'.
>
> (Case study child 3, Home visit: 29 June 2005)

Some children were visited on a weekly schedule and others were visited fortnightly, depending on the children's other afternoon commitments. Occasionally for very urgent reasons, visits were postponed by the researcher or the parents of the case study children.

Most observations were participant observations as the children readily invited me into their '*worlds'.* I was a captive audience and as noted in the third field text above from the home visit with Alexandra, I was readily given the status of '*special teacher'.* Bogdan and Biklen (1992, p2) state that "the researcher enters the world of the people he or she plans to study, gets to know, be known and trusted by them, and systematically keeps a detailed written record of what is heard and observed".

Written records were kept of all home visits, of both discussions and observations. The afternoon home visits were also audio-taped so that the visits could be replayed later to include any details of discussions to the written notes. These field texts became a rich source of data and captured events in the home while the case study children were involved in a range of literacy events.

The following transcript (overleaf) is an example of an excerpt of a field text recorded at a visit to one of the case study children's homes.

Case Study Child 4 - Excerpt from Home Visit: 15 May 2005

Field text (recorded in child's home)	*Transcribed field text*
Doesn't like me No answers No-schl No-friends No-play schl Bad start Computer? Yes - fantastic! I can watch	Winton did not warm to me on this first visit. My questions were either not answered, or they were answered in the negative. No, he did not like school and no, he had no friends and no, he did not like playing anything at school. This was not a very good start so I tried to ask him about playing at home and yes, he liked playing on the computer. Winton agreed to allow me to come and watch.
Good - not afraid Delete Find Arthur Copied info – check Asked mum's help Click mouse Wouldn't answer Turned up vol.	Winton seemed conversant with the computer and not afraid to press the keys. He pressed 'Delete' and left the room to find Arthur. Arthur was 'Arthur's Thinking Games', a CD to play on the computer, suitable for ages 3-5 years, produced by 'The Learning Co'. Winton said he wasn't supposed to put the CD in so his mother came into the study and helped him to open the program. Winton was clicking the mouse. I started to talk to him and as he obviously didn't want to talk to me, he turned up the volume. I tried to talk to him again so he turned up the volume even louder.
Ignored him Watched Turned down vol. Started talking Used com 1 2 wk Sister helped	I just ignored Winton's attempts to 'shut me out' and just sat quietly near the computer observing what he was doing and taking notes. Winton, therefore, decided to turn down the volume and started talking to me. Winton said he used the computer once or twice a week. He also said that his sister *(older)* helped him sometimes but that she would rather be on the computer herself.
Sister enc wint home reader The nest keen Read text no errors pleased	Winton's sister convinced him to go and get his 'home reader'. The book was called 'The Nest' and Winton was now very keen to read the book to me. Winton read the home reader without any errors and was very pleased with himself.
much friendlier asked when returning	Winton was starting to 'warm' towards me by the end of that first visit and he was keen to know when I would be returning.

Table 3.7 Case Study Child 4 - Excerpt from home visit: 15 May 2005

Assessments

Four assessment tasks were selected to provide further data in relation to the case study children's multiliterate skills in their homes. The assessment tasks included:

- Johnson Word List (Appendix H);
- Sutherland Phonological Awareness Test (SPAT) (Appendix I);
- Reading Level on the PM Benchmark Kit (Appendix J); and
- Technology Capabilities (Appendix K).

Johnson Word List (Appendix H)

The Johnson High Frequency Word List (Appendix H) includes a total of 102 high frequency words listed in four columns. These high frequency words are commonly used as a 'timed test' with Year 3 students who are experiencing difficulties in literacy to assess their speed at reading high frequency words by 'sight'. With the case study children, only the 26 words in the first column were used and the children were not 'timed'. This test was used to assess the children's knowledge of words by 'sight' in contrast to using other cues eg. phonological, semantic etc. to decode the words.

Sutherland Phonological Awareness Test (SPAT) (Appendix I)

The SPAT (Appendix I) includes four sections or levels and assesses the child's phonemic awareness; the ability to hear and manipulate sounds in the speech stream (Neilson 1995, cited in NSW DET 2006b). In each of the first two levels, there are four subtests; in the third level, there are three subtests and in the fourth level, there are two subtests, totalling thirteen subtests altogether:

A: Syllabic and Subsyllabic Level

- Syllable Counting
- Rhyme detection
- Rhyme production
- Identification of onset

B: Phonemic Level (CVC)

- Identification of final phoneme
- Segmentation 1
- Blending (VC, CV, CVC)
- Deletion of initial phoneme

C: Phonemic Level (Blends)

- Segmentation 2
- CC Blends: Delete first phoneme
- CC Blends: Delete second phoneme

D: Grapheme-Phoneme Correspondences

- Non-Word reading
- Non-Word spelling

Reading Level on the PM Benchmark Kit (Appendix J)

Several benchmark kits are available in NSW DET schools. These kits are used to assess children's reading ability on a 'levelled' text so that appropriate texts at the child's reading 'level' are provided to use for 'take home readers'. These reading 'levels' are also used to group children in classrooms in ability reading groups for instructional reading lessons. In this inquiry, the PM Benchmark Kit (Appendix J) was used to assess the case study children's reading 'level'.

Technology Capabilities (Appendix K)

The case study children's technology skills were assessed using the criteria from Early Stage 1 (Kindergarten) capabilities in the NSW DET document *Computer-based Technologies in the Primary KLAs* (Appendix K).

Data analysis

Ethnography, case studies and narrative inquiry produce a voluminous amount of data in the form of field texts. These field texts collected in the kindergarten children's homes provided 'thick' descriptions (Geertz 1973) of their multiliterate practices.

To begin with, there was too much data and the task was overwhelming. Data had been collected as previously noted from seven case study families. However, in the final analysis, only five case studies were chosen as the other two studies did not add any new data to previous data collected. With the data from the remaining five case studies, it was decided to focus on one of the case studies for analysis in the first instance. This analysis involved a great deal of reading and rereading in order to

allow for key themes and categories to be identified. This process was repeated for the remaining case studies. This strategy was helpful in funnelling the focus of the study. Each iteration of data analysis further developed the key themes and categories.

Alice's data were chosen and she was selected to be Case Study No.1 because of the large amount and richness of the data collected and because the visits to Alice's home proceeded without interruption. Visits to Alice's home commenced prior to other case study families and as Wednesdays were suitable for both the family and the researcher, and as there were no other visits to work around, future bookings were scheduled. Alice's home visits were given a high priority within the family; the visits all ran to schedule and became a part of the weekly routine.

A boy's case study was chosen early in the analysis to be Case Study No. 2 so that the girls' and boys' findings could be compared and contrasted. Adam's study was chosen from the other boys' studies because the visits to his home proceeded without interruption and, therefore, a large amount of data was collected from his home visits in comparison to the other boys' studies. As in Alice's study, Adam's visits also ran to schedule and became part of the weekly routine whereas the other boys' visits were more interrupted by family events.

Alexandra's study was chosen to be Case Study No. 3. She was the only child in the study who did not have access to a computer at home and her home life was different from any of the other children. Alexandra's four siblings living at home demanded much of their mothers' time and Alexandra's mother depended on Alexandra to help at home with daily tasks and with supervision of the younger children. This difference from the other studies provided more breadth to the data collected.

Winton and Jacob became Case Studies 4 and 5. Their backgrounds had many similarities; both boys attended School 1 and lived in high socioeconomic households. In the early stages of the home visits, both boys displayed a far greater interest in using the computer than reading from print-based materials. Their studies, therefore, provided a contrast to the previous three studies.

Although these last three studies did not provide the quantity of data that was collected from the first two case studies, the diversity of backgrounds and

experiences of all of the children added to the tapestry of multiliterate practices in the children's homes.

After data were collected and recorded, the analysis included the following stages:

- Reading field texts (notes from observations and responses to interviews);
- Listening to, and transcribing audio-tapes;
- Matching the above two sources of data together;
- Identifying themes across all of the case studies;
- Organising the data into themes;
- Identifying categories;
- Constructing the children's individual narratives within the identified themes and categories;
- Interpreting the children's narratives in relation to previous findings from the literature; and
- Searching for commonalities and differences in order to explicate the implications from the data.

These stages are represented and explained in Figure 3.4 (overleaf).

Stages of Data Analysis

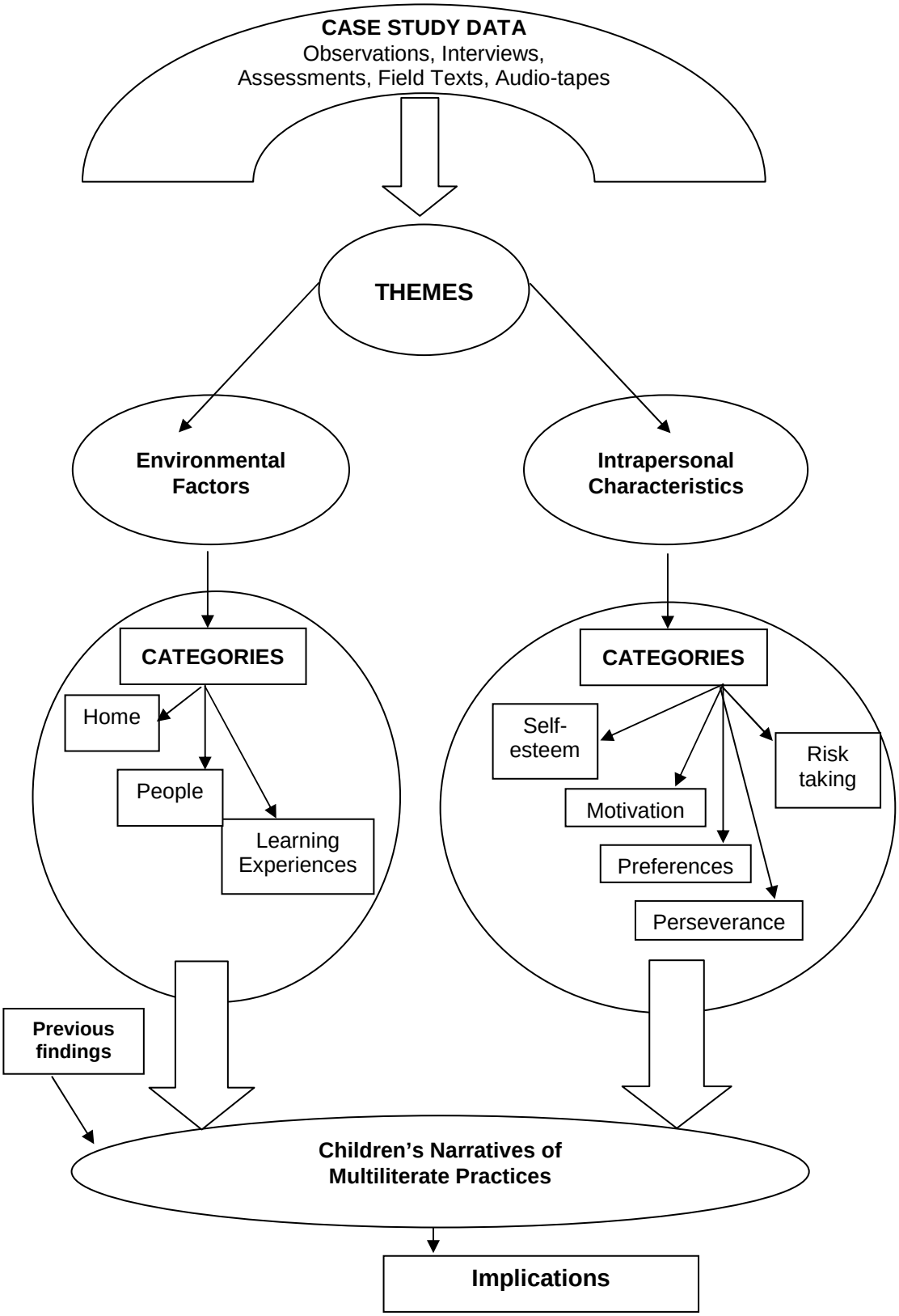


Figure 3.4 Stages of data analysis

Stages of data analysis

Reading field texts (notes from observations and responses to interviews)

Listening to, and transcribing audio-tapes

Matching the above two sources of data together

These three stages occurred simultaneously. Observational field notes taken during home visits were transcribed as shown in Figure 3.4 above and the audio-tapes of these visits added information to, and clarified the field texts. These transcriptions and the responses to the focused interviews were initially typed into folders on the computer for each of the case study children and were categorised only by the date of each home visit.

When Alice's data collection was completed, her file was read and re-read and the audio tapes were listened to again to check that all of the information was included in Alice's file. This process was repeated for the following four case studies.

Identifying themes across all of the case studies

This next stage of the data analysis involved identifying the themes across all of the case studies. This was a long and time-consuming phase. To begin with, after multiple readings and re-readings of the data collected from Alice's study, multiple themes were chosen. An analysis then of the other four case studies was guided by these themes to see if there was a *'fit'* between the data collected and the themes identified from Alice's study. When there was not a 'fit' between the data and the themes, these themes were reconsidered. This process is described by Strauss and Corbin (1990, p74) as '*open coding'* and states,

> The basic analytical procedures by which this is accomplished are: the asking of questions about the data; the making of comparisons for similarities and differences between each incident, event, and other instances of phenomena.

As this process of '*open coding'* continued with all of the remaining case studies, and as questions were asked about the data and about the data in relation to the research questions, the multiple themes were reduced to two major themes: Environmental Factors and Intrapersonal Characteristics.

Organising the data into themes

Identifying categories

Once the themes had been identified, organising the data into these themes was time consuming but not difficult. The data for Alice was rearranged into these two themes and from these themes, categories emerged. As this is reported, this stage all sounds like a simple process, but this was not the reality. There were multiple changes to the categories along the way. Collapsing categories was a process of defining, re-defining and refining and it was important once again as with the themes to always refer to the research questions to clarify the categories needed and then to reorganise the data within these needed categories.

This same process of organising the data into themes and categories was then repeated for each of the case studies.

Constructing the children's individual narratives within the identified themes and categories

Once the themes and the categories were finalised, constructing the children's individual narratives was the most rewarding stage of the data analysis. The stories of the children's lives were shared stories with the researcher; they were journeys of meaningful learning travelled together. As Polkinghorne (1988, p1) claims "narratives are the primary form by which human experiences are made meaningful".

Interpreting the children's narratives in relation to previous findings from the literature

After the children's narratives were recorded, interpretive comments were added to the children's descriptive stories. This interpretive comment related the descriptive stories to previous findings from the literature and from the survey results. The survey results provided the case study stories with points of reference.

Searching for commonalities and differences in order to explicate the implications from the data

Systematically throughout the recording of the children's narratives, commonalities and differences among the collected data were noted, checked and re-checked to make links among the various parts of the data and the emergent dimensions of the

data. The '*bounded system'* (Stake 1995, p2) of each case study then became parts of a whole. These links and dimensions among the children's narratives in a sense providing another narrative, this time with implications for not only future research but also for the main stakeholders in this inquiry – the parents and teachers of young children, and educators responsible for future directions in policy and curriculum.

Mapping Phase: Document analysis

> Records, documents, artifacts, and archives - what has traditionally been called 'material culture' in anthropology – constitutes a particularly rich source of information about many organisations and programs.
>
> (Patton 2002, p293)

Guba and Lincoln (1989, p209) claim that "documents and records are among the most available, accessible and rich sources of information but that they are also the least used". In this inquiry, the documents of the New South Wales (NSW) Board of Studies (BOS) and the Department of Education and Training (DET) relevant to literacy learning in the first year at school were accessed and analysed. The purpose of this analysis was to detail the expectations of the NSW BOS and DET and to establish the relationship between these expectations and the multiliterate practices and skills of the kindergarten children in this inquiry. This analysis, therefore, of these relevant documents was related to the content of the documents. The content of each document was analysed to determine the extent to which techno-literacy skills or expectations were included. Guba and Lincoln (1989, p209) reiterate that "every conceivable kind of context systematically amasses a variety of documents and records that can be of some use".

Clandinin and Connelly (2000) in their narrative inquiry at Bay Street School, among other artifacts collected school board of education policy documents. These documents were an integral part and a rich source of data in their inquiry and, like Guba and Lincoln, Clandinin and Connelly (2000, p114) concluded "one of most important points for us to make is to note how easily, in our experience, it is to forget or ignore the existence and relevance of documents". Patton (1990, p233) also claimed that "document analysis is a rich source of information about programs and their implementation and can give the evaluator ideas for asking other questions".

An overview of the relevant documents analysed are listed below in Table 3.8.

Overview of the Relevant Documents

Document	*Year*	*BOS*	*DET prev. DSE*
Focus on Literacy: A position paper on the teaching of literacy	1997		✓
Teaching Reading: A K-6 framework	1997		✓
Teaching Reading in Early Stage 1	1997		✓
Computer-based Technologies in the Primary KLAs	1997		✓
English K-6 Syllabus	1998	✓	
Focus on Literacy: Spelling	1998		✓
Focus on Literacy: Writing	1999		✓
Focus on Literacy: Talking and listening	2003		✓
Foundation Statements: Early Stage 1	2005	✓	
State Literacy Plan 2006-2008	2006		✓
Our Young Learners: Giving them the best possible start	2006		✓
English K-6 Syllabus	2007	✓	
Best Start: Kindergarten assessment	2007		✓

Table 3.8 Overview of the relevant documents

Miller (1997, p77) argues that ”qualitative researchers are uniquely positioned to study … texts by analysing the practical social contexts of everyday life within which they are constructed and used”. Miller (1997, p77) further claims that “texts are socially constructed realities that warrant study in their own right”. Smith (1984) uses the term *‘crystallisation’* of time and space and explains that documents and institutional texts do not capture processes, discussions, interactions, activities or

other contextual factors associated with the text's construction. Smith (1984) calls this the '*local history'* of the text.

When analysing the NSW BOS and DET documents, these claims of Miller (1997) and Smith (1984) have special significance. With all of these documents being developed by the NSW BOS or DET at a location separate from their place of implementation; the schools, and by personnel unknown to the implementers of the documents; the teachers in schools, there is little understanding or comprehension of the '*local history'* of the text. The processes, discussions, interactions, activities or other contextual factors associated with the development of these documents are unknown to those who use and implement these documents on a daily basis. Nonetheless, these documents are mandatory in NSW DET schools but sadly, the teachers have no *'ownership'* of these documents that shape their teaching lives. The teachers usually don't share the same understanding of the texts that the creators had.

Limitations of the Inquiry

> Every way of seeing is also a way of not seeing.
>
> (Silverman 2000, p825)

The findings that emerged from this inquiry must be interpreted in the light of several limitations.

Validity

In essence one of the main limitations was the validity of the information supplied by parents in the initial survey. Validity revolved around issues of honesty, understanding and interpretation.

In terms of honesty as with all surveys, there was no way of checking the truthfulness of responses despite the fact that parents remained anonymous unless they self-nominated to participate in the case studies. Some parents may have responded with what they thought was the 'appropriate' response. As Mertens (1998, p105) states, "surveys rely on individuals self-reports of their knowledge, attitudes, or behaviours. Thus the validity of the information is contingent on the honesty of the respondent".

In recognising that honesty with surveys is a concern when respondents are *self-reporting,* the surveys were transparently anonymous. From the parents' perspective, they knew that the surveys were being returned by mail to the researcher as they were supplied with a postage-paid, addressed envelope. The surveys were not being returned to, and opened by the school as is often the case with surveys conducted within schools. With this procedure, it is possible for teachers or office staff to note the respondent of the survey. With this inquiry, however, the parents had complete assurance that no-one other than the researcher would have access to the information supplied. Taking this into account, parents, therefore, had no reason not to be truthful in their responses.

Another key issue was whether or not all parents had the same understanding and interpretation of all of the questions, and whether or not there were parental difficulties in estimating the frequencies of behaviours?

Most questions on the questionnaire were very clear like this question below:

> *Storybook reading*
> Do you read to your child? Yes/No
> If you read to your child, in a typical week how often do you read to your child?
>
> At bedtime:
> Once ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ times ____ more, please estimate
>
> Other times:
> Once ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ times ____ more, please estimate
>
> If not, why not? _____

However, some parts of some questions were more open to different interpretations. For example, in the following question which was a part of the above question about storybook reading, parents could have interpreted '*focus on the words'* differently.

> When you, or other members of the family read to your child, do you, or they, discuss or name the pictures, talk about meanings of words, focus on the

words, tell children the names or sounds of letters, find rhyming words? Yes/No

Circle any of the activities mentioned above that you or other family members do.

Also parents when responding to some of the questions were asked to indicate the frequency of events as 'never, seldom, sometimes, often or very often'. Parents could have interpreted these frequencies differently. For example:

Please circle the word that best describes your child's behaviour in a typical week.
My child asks to be read to: Never Seldom Sometimes Often Very often

The researcher had no way of checking parents' understanding or interpretation of the questions, or the frequencies. Mertens (1998, p109) explains that this is a disadvantage of mail surveys as, "the surveyor does not have an opportunity to probe for more in-depth answers or to determine if the respondent understood the questions appropriately".

While recognising both of these limitations, as the survey was never intended to be used for statistical purposes, variations across parents' understanding of terms, *'focus on words'* or interpretations of frequencies, *'sometimes, always'* would have had minimal impact on the findings.

Participation and bias

With mailed surveys where respondents and non-respondents are fairly similar, a response rate of around 70% is acceptable, however, where there is a greater difference in respondents, higher response rates are needed to counteract any bias (Mertens 1998, p130-131). The response rate to this survey was just over a half (53%), therefore, these returned surveys may not be representative of the wider group of parents; the other 47%. There was no way of knowing whether or not the group of parents who returned the surveys represented parents who were more interested in participating at home in literacy-related activities with their children than the remainder of the parents.

Sampling

The sample of respondents was predominantly Australian born middle to upper-class families living in the Sydney metropolitan region. Therefore, the extent to which the data inform us about the multiliterate practices of kindergarten children in the homes of working-class, rural, non-English speaking or bilingual children, indigenous children or children from a range of minority groups is a question for future research. Other variables such as parental literacy levels and disposition towards literacy and education may also play a role in the opportunities made available for young children in the home. Parents were not asked to comment on these variables in the survey. All parents who self-nominated to participate in the case studies admitted that their children's education as a whole, and their literacy learning were high priorities for them. It was, therefore, unknown whether or not the sample of case study families was indicative of the wider group of families.

Trust

The development of trust in the researcher was pivotal to the success of this inquiry. The researcher needed to develop close rapport with the case study families and these families needed to have trust in not only the researcher, but also the research process and the findings presented. It was expected that parents would welcome the researcher into their homes.

Ethical Considerations

Ethics approval was obtained from the University of Wollongong Human Research Ethics Committee and the New South Wales Department of Education and Training prior to the commencement of this study. Final approval from the University of Wollongong Research Ethics Committee was granted on 16 November 2004. Ethics Number: HE/04/243. Final approval from the New South Wales Department of Education and Training was granted on 9 December 2004. SERAP Number: 04.153.

The principals of the three schools identified for the study were contacted and written agreement to participate in the study was given.

Participation and Anonymity

Participation in both the initial and the immersion phases was voluntary.

Initial phase

Details of the research were explained at the *'Meet the Teacher'* evenings for the kindergarten parents. These evenings were held at the beginning of the new school year at the three selected schools. After these meetings, information about the research and the survey was included in each of the school's weekly newsletters (Appendix D). This provided information for any parents who did not attend the *'Meet the Teacher'* evenings.

A full description of the study and its intended purpose (Appendix B), together with the survey (Appendix A) were distributed to the principals of the participating schools, and individual parents of the children attending kindergarten. This information was sent home in a sealed envelope with all kindergarten students. From the time of receiving this information, parents could decide whether or not to complete and return the survey in the return paid self-addressed envelope.

A reminder (Appendix D) to return the survey was included in each school's newsletter two weeks later. There was no further follow-up with parents.

Immersion phase

A self-nomination form (Appendix C) to participate in the case studies was included with each survey sent home to kindergarten parents. Parents who wished to participate in the case studies self-nominated and returned the self-nomination form directly to the researcher. The researcher then contacted each self-nominated family by phone to organise an initial meeting.

Consent and confidentiality

Participants were assured that all information obtained would be treated with absolute confidentiality. Consent Forms were completed by the parents prior to the commencement of the immersion phase. Descriptive characteristics of the participants as well as beliefs, attitudes and values naturally needed to be included when writing up the results. However, any type of personal information, such as

names or any identifying characteristics, were not mentioned or included in the results of the study. All information pertaining to participants remain the property of the researcher and have not been used for any purpose except the execution of this study. Students' and parents' names have not been used in the inquiry. Parents only indicated their children's gender and birth date. Names of case study parents and children and the names of the schools have not been identified.

Consent withdrawal

Participants had the right to withdraw from the study at any stage, however, no families withdrew from the study. If any families had wished to withdraw, they would not have been identified or known to those who continued to participate and they would not have been subjected to prejudice or disadvantage in any way.

Summary

This chapter described the construction of this inquiry including the methodology used. The participants in both the initial and immersion phases were described and the data collection procedures and analysis were explained. A description of the three school locations was also provided. In the mapping phase, an overview of the NSW BOS and DET documents relevant to this inquiry was included. Limitations of the study and ethical considerations were outlined.

The following chapter, Chapter Four, will analyse current policy and curriculum of the New South Wales (NSW) Government's Board of Studies (BOS) and Department of Education and Training (DET) that relate to literacy learning in the first year at school. Although this mapping phase is the third phase of the inquiry, it is more appropriate for its placement to precede the chapters presenting the findings of the initial and immersion phases of the inquiry.

Chapter Four

Documents … and their Stories

Chapter Four

Documents … and their Stories

Introduction

The second question in this inquiry examines how the multiliterate practices and skills of the kindergarten children in the study relate to the expectations, in the first year at school, of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET). A full analysis of these documents and how this material relates specifically to this inquiry is discussed in this chapter. For the purpose of this inquiry, it is important to outline these documents in relation to multiliterate practices, including:

- paper and print-based literacies; and
- techno-literacies.

The following figure describes the relationship among the above literacies.

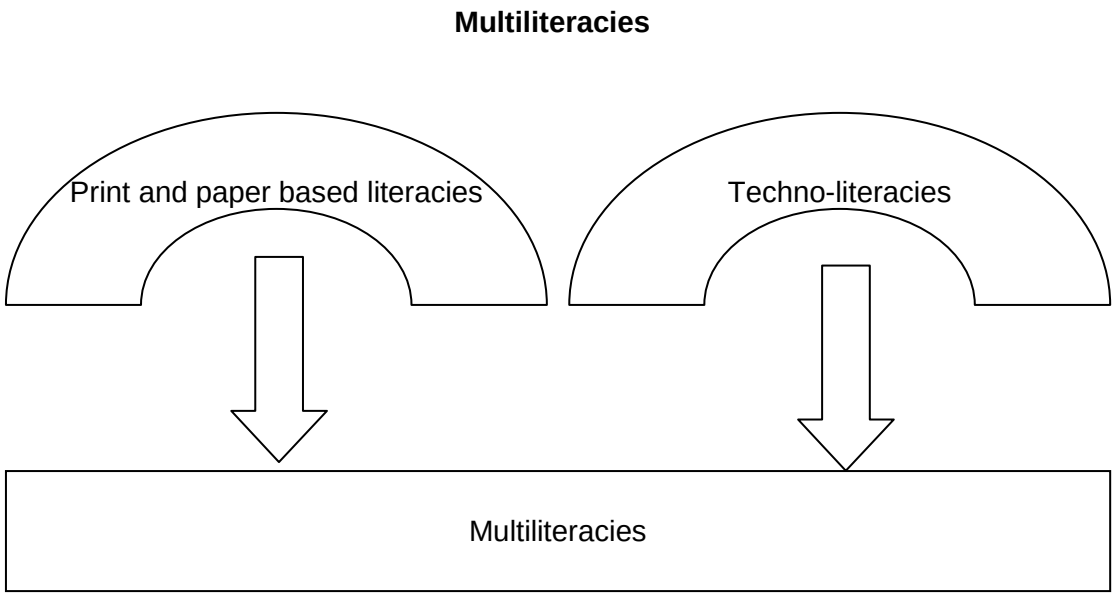


Figure 4.1 Multiliteracies

The curriculum taught in NSW public schools in both primary and secondary schools is governed by the syllabuses developed by the Board of Studies (BOS) NSW. These

syllabuses are mandatory documents for all teachers in NSW employed by the DET. The roles of both the BOS and the DET are outlined below.

What is the Board of Studies NSW?

In 1990, the New South Wales government passed new legislation pertaining to education of students in all schools in the state. One of the key outcomes of the *Education Reform Act 1990,* as it was called, was the establishment of a statutory body that would oversee the development and assessment of curriculum in all key learning areas (Australian Education Council 1991). The Board of Studies (BOS) NSW, as it was named, consists of twenty-three members representing a wide section of the community and is appointed for a four-year term (Carrick 1994). As the BOS website states,

> The Board of Studies NSW was established in 1990 to serve government and non-government schools in the development of school education for Years K-12. It provides educational leadership by developing quality curriculum and awarding secondary school credentials, the School Certificate and the Higher School Certificate.
>
> The Board of Studies:
>
> - sets the core curriculum by developing syllabuses for Kindergarten to Year 12 and provides support materials for teachers and parents;
> - manages the NSW School Certificate External Tests (Year 10) and the Higher School Certificate Examinations (Year 12) each year;
> - assesses student achievement and awards high quality credentials to meet the needs of the full range of students;
> - promotes the provision of quality education by developing, communicating and implementing educational policies and practices;
> - provides advice on grading and assessment policy and procedures;
> - promotes the provision of quality education through the registration and accreditation of non-government schools, certifying that they may teach students and enter students for the examinations; and,
> - effectively manages its resources so that educational objectives are met.
>
> (Board of Studies NSW 2008)

What is the NSW Department of Education and Training?

The NSW Department of Education and Training (DET) is one of the systems of education within the state. Others include the Catholic Education Commission, and the Independent School System. While all systems are required by the law of the state to follow the syllabus and assessment mandates of the Board of Studies NSW, only the DET is directly responsible to the NSW Minister for Education and Training and thus is known as the public education system.

The DET website states,

> The Minister for Education and Training, The Hon John Della Bosca, MLC was appointed as the Minister for Education and Training on 2nd April 2007 and his portfolio includes responsibility for schools, TAFE, state training services, adult, community and migrant education and higher education.
>
> The NSW Department of Education and Training delivers high quality, internationally competitive public education and training from early childhood (pre-school), through to the compulsory years of schooling (Kindergarten to Year 10), and senior secondary education leading to the award of the NSW Higher School Certificate (in Years 11 and 12).
>
> It also provides TAFE NSW courses, adult and community education courses, migrant English programs, post-secondary art courses and advice to the NSW Government on higher education. The Department is particularly focused on addressing the training needs of industry and meeting the challenge of skills shortages in certain trades.
>
> It strongly promotes lifelong learning, and aims to provide students with a smooth transition from school to work or further study, and from post-compulsory education and training to work or further study.
>
> The Department is the largest single organisation, public or private, in Australia. With a recurrent budget of $11.2 billion, the Department is responsible for around one quarter of the State's total budget.

> Around 741,000 students are taught by over 50,000 full time teachers in more than 2,200 NSW Government schools - including pre-schools, primary schools, central schools, high schools, colleges and specialist schools.
>
> NSW leads the way in Australia in requiring new teachers to be accredited in terms of professional teaching standards through its Institute of Teachers. It also requires teachers to undertake continuous professional development.
>
> With over 500,000 enrolments, and 10,000 permanent teachers, TAFE NSW is not only Australia's largest training provider, it is also among the largest in the world. TAFE NSW has 10 Institutes delivering a wide range of nationally recognised courses at more than 130 metropolitan and regional campuses.
>
> (NSW DET 2008a)

A major outcome of the *Education Reform Act 1990* was that the Department of School Education (DSE) (later to become the Department of Education and Training) was no longer responsible for the development of curriculum (syllabuses) for schools for primary education (ie. K-6). This responsibility now shifted to the newly established BOS who had only previously been responsible for the development of curriculum for the senior syllabuses (Years 7-12).

Both the DSE and BOS, however, were responsible for the development of initiatives designed to help schools implement the new English K-6 Syllabus (Board of Studies NSW 1994) in NSW and a number of teaching resources were published and circulated to all schools in order to support the implementation of this new syllabus.

Syllabuses

Across NSW K-6 schools, the BOS syllabuses are mandatory teaching documents. These current syllabuses were developed individually in the period 1991 to 2002 in the following six Key Learning Areas (KLAs) for primary (K-6) schools:

- English (published 1994, 1998 and 2007);
- Mathematics (published 2002);
- Science and Technology (published 1991, with Outcomes and Indicators updated in 2000);
- Human Society and Its Environment (published 1998);

- Personal Development, Health and Physical Education (published 1999); and,
- Creative Arts (published 2000).

As the focus of this inquiry is literacy learning in the first year at school, only the English K-6 Syllabus as it relates to Kindergarten will be analysed. A short history of the development of the English K-6 Syllabus is included.

History of the Development of the English Syllabus

As stated above, before the *Education Reform Act 1990*, the DSE had been responsible for the development of primary (K-6) curriculum and since the mid-eighties the DSE had been developing a new K-6 English Syllabus. After many draft documents, the new K-6 English syllabus was finally ready for publishing and distribution at the beginning of 1991. The syllabus, however, was put on hold at the last minute by the Minister for Education (Dr Metherell), and after the formation of the BOS in 1990, the DSE relinquished its responsibility for the development of the English K-6 Syllabus and the BOS took over this responsibility (Australian Education Council 1992).

The draft English K-6 Syllabus was released in Term 1 1992 and after an extensive review process that took almost two years (Australian Education Council 1993). The final copy of the mandatory *English K-6 Syllabus and Support Document* (Board of Studies NSW 1994) was introduced in New South Wales schools in the latter part of 1994 for implementation in 1995. The March 1995 NSW state election resulted in a change of government. The incoming government withdrew the *English K-6 Syllabus and Support Document* (Board of Studies NSW 1994) and commissioned a review of the outcomes and profiles approach to curriculum. Professor Ken Eltis chaired the Review Panel. This panel took advice from an Educational Committee which comprised representatives drawn from a range of academic, professional, teacher union, community and employer bodies. Recommendation Six of the Eltis Report*, Focusing on Learning: Report of the review of outcomes and profiles in NSW schooling (1996)* (Eltis 1995, cited in Board of Studies NSW 2007b) dealt specifically with the *English K-6 Syllabus* and stated that,

- the existing syllabus continue to be implemented in 1996 and 1997, with Functional Grammar no longer being mandatory; and,

- the experience of schools in using the English K-6 syllabus is to inform a revision of the syllabus by the Board of Studies, which will review and reduce the number of outcomes and lead to the development of a replacement syllabus and support document(s) based on stages, for introduction in 1998.

(Board of Studies NSW 2007b)

After two years of consultation and based on the recommendations of the Eltis Report *Focusing on Learning: Report of the review of outcomes and profiles in NSW schooling* (Eltis 1995, cited in Board of Studies NSW 2007b), the revised Board of Studies NSW *English K-6 Syllabus* was released in 1998 for implementation in schools. Along with many other changes from the 1994 syllabus, the new 1998 syllabus stated,

> The syllabus is also based upon a recognition that children's formative learning experiences will often involve using technology. It acknowledges the increasing availability of computers in schools and in the home. Information technology enables students to locate, access, view and analyse a range of texts. In addition, it provides opportunities for students to design and create information products. Indicators have been developed in each stage to enable teachers to monitor the development of students' knowledge, skills and understandings when using different technologies.
>
> (Board of Studies NSW 1998, p5)

The revised Board of Studies NSW (1998) *English K-6 Syllabus* has since been updated on the BOS website. In the 2007 update of the NSW *English K-6 Syllabus* on the BOS website, the Stage Statements (Board of Studies NSW 1998) on pages 12 and 13 have been replaced with Foundation Statements (Board of Studies NSW 2007c). These statements were developed by the BOS in 2005. The Foundation Statements, like the Stage Statements are statements about the expectations of student learning by the end of a stage. The Foundation Statements for Early Stage 1 relate to the children in Kindergarten and these are outlined later in this chapter.

The syllabuses have been written within what is referred to as an Outcomes Standard Framework. Therefore each syllabus outlines specific outcomes that should be achieved by the end of stages (described below).

> The outcomes describe the knowledge, skills, understandings and strategies that students demonstrate when *learning to* talk, listen, read and write. They also specify the knowledge and understandings students develop when *learning about* talking, listening, reading and writing. These outcomes are achieved as students engage with the content of the syllabus.
>
> (Board of Studies NSW 2007a, p5)

The English K- 6 Syllabus (Board of Studies NSW 1998)

The *English K-6 Syllabus* (Board of Studies NSW 1998) is organised into three strands:

- Talking and Listening;
- Reading; and,
- Writing.

Stages

The four stages in the *English K-6 Syllabus* are outlined below:

- Early Stage 1 relates to Kindergarten (children aged approximately 4 years, 6 months to 6 years, 6 months);
- Stage 1 includes Years 1 and 2 (children aged approximately 5 years, 6 months to 8 years, 6 months);
- Stage 2 includes Years 3 and 4 (children aged approximately 7 years, 6 months to 10 years, 6 months); and
- Stage 3 includes Years 5 and 6 (children aged approximately 9 years, 6 months to 12 Years, 6 months).

Outcomes

The Board of Studies explains that,

> outcomes are specific statements of the results intented by the Syllabus. These outcomes are achieved as students engage with the content of the syllabus and are arranged in stages. The outcomes are statements of the knowledge, skills and understandings expected to be gained by most students as a result of effective teaching and learning by the end of a stage.
>
> (Board of Studies NSW 1998, p15).

It was anticipated that the learning outcomes expressed in the syllabus would assist teachers “to plan teaching programs and to identify outcomes that related to a given level of student achievement” (Australian Education Council 1991, p2).

Each outcome has a set of indicators that serve as markers of children’s progression.

Indicators

The 1998 *English K-6 Syllabus* states,

> An indicator is a statement of the behaviour that students might display as they work towards the achievement of syllabus outcomes. Indicators exemplify the range of observable behaviours that contribute to the achievement of outcomes. They assist teachers to monitor student progress within a stage as well as to make an on-balance judgement about the achievement of outcomes at the end of a stage.
>
> (Board of Studies NSW 1998, p15)

The Changing Nature of Literacy

It is important when analysing the NSW DET and BOS documents from the ‘90s to the present day, to explore the differences in how literacy and literacy practices are defined. Several definitions of literacy are included below. *Any references to techno-literacies are in italics.*

> In 1997, the Department of School Education (DSE) introduced the State Literacy Strategy; the directions and expectations were detailed in Focus on Literacy, a position paper on the explicit and systematic teaching of literacy in NSW government schools. The literacy strategy was developed to ensure Government literacy commitments were addressed in a coordinated and comprehensive way. In 1999, to reflect government commitments, the literacy strategy was expanded to the State Literacy and Numeracy Plan. The State Literacy Strategy particularly focused on the teaching of reading K–6.
>
> (NSW Public Schools n.d.)

One of the documents produced by the DSE as part of the State Literacy Strategy in 1997, *Teaching Reading: a K-6 Framework* (NSW DSE 1997b) includes on page 6 the following definitions of reading:

> Reading is the process of constructing meaning from written text.
>
> I define reading as a message-getting, problem-solving activity which increases in power and flexibility the more it is practised. My definition states that within the directional constraints of the printer's code, language and visual perception responses are purposefully directed by the reader in some integrated way to the problem of extracting meaning from cues in a text, in sequence, so that the reader brings a maximum of understanding to the author's message.
>
> Clay, M (1991) Becoming Literate
> The Construction of Inner Control.
>
> Reading is an essential part of literacy. Any discussion of reading must take place in the context of what it means to be literate in today's society. The following definition underpins these materials.
>
> Literacy is the ability to read and use written information and to write appropriately, in a range of contexts. It is used to develop knowledge and understanding, to achieve personal growth and to function effectively in our society. Literacy also includes the recognition of numbers and basic mathematical signs and symbols within text.
>
> Literacy involves the integration of speaking, listening and critical thinking with reading and writing. Effective literacy is intrinsically purposeful, flexible and dynamic and continues to develop throughout an individual's lifetime.
>
> All Australians need to have effective literacy in English, not only for their own personal benefit and welfare but also for Australia to reach its social and economic goals.
>
> Australia's Language: The Australian Language and Literacy Policy, Department of Employment, Education and Training (1991).

(NSW DSE 1997b, p6)

Part of the definition above is similar to the definition of literacy included in the *English K-6 Syllabus 1998*. However, the 1998 syllabus also recognises the role of technology in literacy learning. This 1998 definition remains the same in the online 2007 edition of the syllabus on the BOS website. In both documents, it states,

> 'Literacy is the ability to read and use written information and to write appropriately in a range of contexts. It is used to develop knowledge and understanding, to achieve personal growth and to function effectively in our society.
>
> Literacy involves the integration of speaking, listening and critical thinking with reading and writing.'
>
> (Source: Department of Employment, Education and Training, Australia's Language and Literacy Policy, companion volume to the policy paper, AGPS, Canberra 1991:9.)
>
> The syllabus emphasises the development of critical literacy. This involves students in questioning, challenging and evaluating the texts that they listen to, read and view. Critical literacy enables students to perceive how texts position readers to take a particular view of people and events.
>
> *In recognition of developments in multimedia and electronic communication, the syllabus outcomes also address the literacy demands of viewing and using computers.*
>
> (Board of Studies NSW 1998 & 2007, p5)

This definition of both the 1998 and 2007 BOS documents includes the recognition of multimedia, technology, computers and electronic communication.

The current NSW DET position on literacy and the role that technology now plays in what it means to be literate in today's society is posted on the DET (2008b) website, the Literacy Policy objectives state,

> Literacy is the ability to understand and evaluate meaning through reading and writing, listening and speaking, viewing and representing;

> *Literacy skills need to continually expand and diversify because our rapidly changing social and economic environment requires competence in a range of new communication forms and media;* and,
>
> Literacy competence is central to achievement in all areas of learning as students progress through the early, middle and later years of schooling and into the workforce and personal life.
>
> (NSW DET 2008b)

About the teaching of literacy in the early years, the DET literacy homepage states,

> In the early years, literacy teaching will include the explicit teaching of: phonemic awareness; phonics; vocabulary knowledge; comprehension; concepts about print; grammar, punctuation; spelling and handwriting
>
> (NSW DET 2008b)

On the literacy homepage of the DET Curriculum Support website 2008, it states,

> Literacy learning in NSW government schools is fundamental to success at school, in the workforce and in life.
>
> *To be literate within contemporary society requires students to read, write, talk and listen and think critically in order to understand written, visual and technologically based information.*
>
> Literacy competence is central to achievement in all areas of learning and remains a priority for all students as they progress through the early, middle and later years of schooling.
>
> Developing each student's literacy skills through balanced, integrated, systematic and explicit literacy teaching is a key responsibility for each and every teacher in NSW public schools from Kindergarten to Year 12.
>
> (NSW DET 2008b)

Apart from the DSE document in 1997, *Teaching Reading: A K-6 framework* (NSW DSE 1997b), all other definitions of literacy have included references to, and recognition of, the role of technology in becoming literate.

The Teaching of Technology

The only document that specifically assists teachers in their implementation of technology in classrooms is the DET document *Computer-based Technologies in the Primary KLAs* (NSW DET 1997). This document identifies five capabilities that,

> represent the relationship between attitudes, knowledge and skills, and are progressively refined throughout a student's education. While the development of technological capability occurs as focused study in the key learning area of Science and Technology K-6 … capabilities with computer-based technologies should be developed in all KLAs.
>
> (NSW DETCSD 1997, p11)

Students should participate each year in the following five capabilities to assist in the development of their ability to:

- use computer-based technologies to locate, access, evaluate, manipulate, create, store and retrieve information;
- express ideas and communicating with others, using computer-based technologies;
- develop an awareness of the range of applications of computer-based technologies in society;
- discriminate in the choice and use of computer-based technologies for a given purpose; and,
- develop the confidence to explore, adapt and shape technological understandings and skills in response to challenges now and in the future.

(NSW DETCSD 1997, p11)

It is interesting to note that this document has not been updated to include the major shifts on what is known as Web2.0 and Information Communication Technologies or ICT.

Policy Statements

Policy statements provide clear positions on how the explicit and systematic teaching of literacy will take place in all classrooms from Kindergarten to Year 12. The documents relevant to this study are listed below and are in order of their publication dates. All references to techno-literacies have been explicated in Table 4.1 (overleaf).

- *Focus on Literacy: A position paper on the teaching of literacy* (NSW DSE 1997a)
- *Teaching Reading in Early Stage 1* (NSW DSE 1997c)
- *Computer-based Technologies in the Primary KLAs* (NSW DETCSD 1997)
- *English K-6 Syllabus* (Board of Studies NSW 1998)
- *Focus on Literacy: Spelling* (NSW DETCSD 1998)
- *Focus on Literacy: Writing* (NSW DETCSD 1999)
- *Focus on Literacy: Talking and listening* (NSW DETCSD 2003)
- *Foundation Statements: Early Stage 1* (Board of Studies NSW 2005)
- *State Literacy Plan 2006-2008* (NSW DET 2006b)
- *English K-6 Syllabus* (Board of Studies NSW 2007a)
- *Best Start: Kindergarten assessment* (NSW DET 2007)

Overview of the Relevant Documents

Y: Yes, several references to techno-literacies
N: No, no reference to techno-literacies
Minimal: Only 1 or 2 references to techno-literacies

Document	*Year*	*BOS*	*DET prev. DSE*	*Reference to techno-literacies*
Focus on Literacy: A position paper on the teaching of literacy	1997		✓	Y minimal
Teaching Reading: A K-6 Framework	1997		✓	N
Teaching Reading in Early Stage 1	1997		✓	N
Computer-based Technologies in the Primary KLAs	1997		✓	Y
English K-6 Syllabus	1998	✓		Y
Focus on Literacy: Spelling	1998		✓	N
Focus on Literacy: Writing	1999		✓	Y minimal
Focus on Literacy: Talking and listening	2003		✓	N
Foundation Statements: Early Stage 1	2005	✓		Y minimal
State Literacy Plan 2006-2008	2006		✓	Y minimal
Our Young Learners: Giving them the best possible start	2006		✓	Y
English K-6 Syllabus	2007	✓		Y
Best Start: Kindergarten assessment	2007		✓	N

Table 4.1 Overview of the relevant documents

Each of the documents listed in the table above, that includes references to techno-literacies, has been analysed to examine its position on the role of technology in early literacy learning. The most recent document put out by the DET, *The Best Start: Kindergarten assessments*, has no references to techno-literacies; however, it is also analysed because of its importance in early assessment of kindergarten children.

Focus on Literacy: A position paper on the teaching of literacy

Within the position paper on the teaching of literacy *Focus on Literacy 1997, NSW Department of School Education*, a 23-page document, the one reference to techno-literacies states,

> Since 1991, the very nature of what constitutes literacy has been expanded by the emerging multimedia and information technologies, the appearance of the Internet and further developments in computing and word processing.
>
> (NSW DSE 1997a, p8)

Computer-based Technologies in the Primary KLAs

Activities to develop computer capabilities from *Computer-based Technologies in the Primary KLAs* (NSW DSE 1997), relevant to Early Stage 1 students include:

Please see print copy for Table 4.2

Table 4.2 Computer-based Technologies in the Primary KLAs
(NSW DETCSD 1997, pp12-20)

English K-6 Syllabus

Within the 1998 edition of the English K-6 Syllabus and also in the 2007 edition of the syllabus (on the BOS website),

> the word 'text' is used broadly as any written, spoken or visual communication involving language. It will include picture books, novels, newspapers, letters, conversation, speeches, performances of plays, feature films, television programs, computer graphics and advertisements
>
> (Board of Studies NSW 1998 & 2007, p5)

The syllabus, therefore, recognises that texts include among other things, computer graphics. On the same page of the 1998 syllabus and also on the BOS website (2007), it states,

> The syllabus is also based upon a recognition that children's formative learning experiences will often involve using technology. It acknowledges the increasing availability of computers in schools and in the home. Information technology enables students to locate, access, view and analyse a range of texts. In addition, it provides opportunities for students to design and create information products. Indicators have been developed in each stage to enable teachers to monitor the development of students' knowledge, skills and understandings when using different technologies.
>
> (Board of Studies NSW 1998 & 2007, p5)

As noted above under the section on the history of the development of the English K-6 Syllabus, the above paragraph was not included in the 1994 edition.

The introduction section (page 5), of both the 1998 syllabus, and the 2007 update on the BOS website, recognises that 'texts' include 'computer graphics' and that children's early learning experiences involve the use of technology.

The following table specifically outlines the Early Stage 1 (Kindergarten) outcomes from the English K-6 Syllabus, (Board of Studies NSW 1998) that include references to techno-literacy skills. The outcomes are listed according to the three strands in the English syllabus:

- Talking and Listening;

- Reading; and,
- Writing.

It needs to be noted that the only change on the BOS website (2007) from the 1998 edition of the *K-6 English Syllabus* is the replacement of the Stage Statements by the Foundation Statements (Board of Studies NSW 1998 & 2007, pp12-13). These changes are detailed later in this section under *Foundation Statements: Early Stage 1*.

The overview of outcomes, indicators, content overview, scope and sequence and principles for planning, programming, assessing, reporting and evaluating remain the same as the 1998 edition. This syllabus guides the teaching and learning programs for all teachers in NSW schools.

Strand - Talking and Listening

Please see print copy for Table 4.3

Table 4.3 *English K-6 Syllabus* (Board of Studies NSW 1998, pp20-26)

Strand – Reading

Please see print copy for Table 4.4

Table 4.4 *English K-6 Syllabus* (Board of Studies NSW 1998, pp28-34)

Strand – Writing

Please see print copy for Table 4.5

Table 4.5 *English K-6 Syllabus* (Board of Studies NSW 1998, pp36-46)

In the Content Overview of Early Stage 1, the following references to techno-literacies are included:

Content Overview of Early Stage 1

Please see print copy for Table 4.6

Table 4.6 *English K-6 Syllabus* (Board of Studies NSW 1998, pp50-51)

In the Scope and Sequence of Text Types for Early Stage 1, the following references to techno-literacies are included (overleaf):

Scope and Sequence of Text Types for Early Stage 1

Please see print copy for Table 4.7

Table 4.7 *English K-6 Syllabus* (Board of Studies NSW 1998, p67)

In the Scope and Sequence of Phonological and Graphological Skills for Early Stage 1, the following reference to techno-literacies is included:

Scope and Sequence of Phonological and Graphological Skills for Early Stage 1

Please see print copy for Table 4.8

Table 4.8 *English K-6 Syllabus* (Board of Studies NSW 1998, p79)

Focus on literacy: Writing

Within the document *Focus on Literacy: Writing 1999, NSW Department of Education and Training* from the *State Literacy and Numeracy Plan* (a 50-page document) a quarter-page reference to computer-based technologies is made on page 24. In summary this quarter-page reference states that through computer-based technologies, students:

- are motivated through the ease of making changes to text;
- need to develop confidence, accuracy and speed in keyboard skills;
- explore layout through word processors, desktop publishing, and hypertext programs and discerningly choose fonts and formatting possibilities;
- write in different forms including hypertext links; and,
- use the Internet and understand about quality control and copyright.

(NSW DETCSD 1999, p24)

Foundation Statements: Early Stage 1

In 2005, the Board of Studies developed Foundation Statements for the NSW primary curriculum to describe state-wide common curriculum requirements to assist with prioritising what needs to be taught. These Foundation Statements were in response to the *Time to Teach, Time to Learn: Report on the evaluation of outcomes assessment and reporting in NSW Government schools* (Eltis & Crump 2003) on the evaluation of outcomes assessment and reporting in NSW Government schools. When Professor Ken Eltis's report was released in November 2003, the NSW Government accepted all recommendations.

These Foundation Statements replaced the Stage Statements in the six K-6 syllabuses. These statements serve as the overall philosophy and expectations for the teaching of literacy and English. In relation to technology, the earlier Stage Statement for Early Stage 1 (Kindergarten) in the English K-6 Syllabus (1998), stated,

> *They recognise some common computer icons and use these to perform elementary tasks*
>
> (Board of Studies NSW 1998, p12).

The new 2007 Foundation Statements for Early Stage 1 (Kindergarten), in the K-6 Syllabus is presented below in full. The only reference to techno-literacy is indicated in italic type:

> Students mix and talk informally with peers, teachers and known adults. They give short talks and interact effectively in the classroom and in groups. Students listen with attentiveness to follow simple instructions and ask relevant questions.

> They express ideas clearly, demonstrating an emerging awareness of how people use spoken language for different purposes.
>
> They explore the way familiar spoken texts are constructed and the features of these texts. Students develop reading, viewing and comprehension skills and strategies using context, grammar, word usage and phonics in short predictable printed texts on familiar topics. They recognise, discuss and respond to the different kinds and purposes of various written and visual texts. Students explore and identify some language features of written and visual texts.
>
> Students write with an increasing awareness of the nature, purpose and conventions of written language. They produce simple texts that demonstrate an awareness of the basic grammar and punctuation needed. Students know and use letters and sounds of the alphabet to attempt to spell known words and use most lower and upper case letters appropriately to construct sentences. *Students explore the use of computer technology to construct texts.*
>
> (Board of Studies NSW 2007c)

State Literacy Plan 2006-2008

The NSW DET *State Literacy Plan 2006-2008* is prepared with the NSW Minister of Education. It serves as a plan at the state, regional and school level. The plan has clearly stated expected outcomes and targets. Its introduction states,

> To be literate within contemporary society requires students to read, view, write, speak, listen and think critically in order to understand written, visual, and technologically based information.
>
> (NSW DET 2006b, p2)

The Plan refers on pages 5, 7 and 8 to incorporating appropriate use of ICTs in professional learning for teachers and in accessing successful teaching and learning programs through the website *Teaching and Learning Exchange (TaLe).* The only reference to student learning and the use of technology is also on page 7 where the plan states,

> Schools will improve literacy achievements by:

> Implementing Literacy on Track (K-4) and Lark Online (K-12) programs particularly in schools with a high proportion of students (10% more than the state average) in the bottom two bands as reported on state-wide tests
>
> (NSW DET 2006b, p7).

Our Young Learners: Giving them the best possible start

On page 4 of the NSW DET (2006a) document *Our Young Learners: Giving them the best possible start,* as part of the NSW Government investments in the Early Years, key achievements to date, state,

> $75 million to increase access to educational options through the use of technology, including the use of satellite technology for distance education and the availability of online courses and resources. Recurrent funding has been allocated over the next four years for the provision of e-services for students and teachers.
>
> (NSW DET 2006a, p4)

Furthermore, the document states that two of the main actions from the 2006-2009 goals are designed to identify individual children's learning needs and to increase and support student and teacher access to technologies (NSW DET 2006a). Key actions also include:

> supporting an ICT focus for our young learners and identifying emerging technologies which open up access to knowledge for all students.
>
> (NSW DET 2006a, p7)

> increasing the use of different technologies as tools to stimulate inquiry and innovation and to broaden children's understanding of the complex world in which we live.
>
> (NSW DET 2006a, p8)

It is interesting to note that in these more recent documents and policies, 'computer technologies' has move to 'ICT', although there seems to be an assumption that all stakeholders know exactly what 'ICT' incorporates.

Best Start: Kindergarten assessment

The Best Start: Kindergarten assessment was developed in 2007 for implementation over three years across NSW public schools from 2008-2010. Each year in the targeted schools, assessments are to be completed by Week 7 of the first term at school. The assessments include both literacy and numeracy, however, for the purpose of this inquiry, reference will only be made to the literacy assessments.

> There are three components to Best Start including:
>
> - A new statewide Kindergarten entry assessment.
> - The expansion of Reading Recovery, an early literacy intervention for students in the early years of schooling.
> - The provision of time to support expert literacy and numeracy leaders to all infants, primary and central schools.
>
> The Assessment will identify literacy and numeracy knowledge and skills that each child brings to school as they enter Kindergarten.
>
> The Assessment in literacy will include aspects of speaking, writing, reading texts, comprehension, concepts about print, vocabulary, phonics and phonemic awareness. It will recognise that children come to school with varied strengths, experiences and needs and from diverse communities and cultures. The importance of 'social competence' for early learning success is recognised and consideration is being considered for its inclusion.
>
> Excerpt from 'Information Sheet No.1, October 2007'
>
> (NSW DET 2007, pp1-2)

In the 'Literacy task booklet' of *Best Start: Kindergarten Assessment* (NSW DET 2007) there are five assessment tasks linked to outcomes in the *English K-6 Syllabus* (Board of Studies NSW 2007a), as outlined in Table 4.9 (overleaf).

Best Start: Kindergarten literacy assessments

Code: R - Reading; T - Talking; W - Writing; ES1 - Early Stage 1
Nos. correspond to outcome nos.

Activity	*Assesses*	*English Syllabus K-6 links*
Activity 1	Concepts about print Reading texts Phonics	RES1.5 ▪ Recognises and interprets print in the environment RES1.7 ▪ Interprets pictures with labels, environmental print and logos, advertising RES1.6 ▪ Recognises print from drawing ▪ Visually discriminates same/different letters RES1.8 ▪ Recognises some letters of the alphabet
Activity 2	Phonemic awareness	TES1.2 ▪ Recognises and says words that rhyme RES1.6 ▪ Recognises words that rhyme ▪ Recognises spoken words with the same sound
Activity 3	Reading texts Concepts about print	RES1.5 ▪ Recognises words during shared reading of literacy texts RES1.6 ▪ Distinguishes print from drawing ▪ Shows awareness of the horizontal nature of print in English and left to right direction ▪ Knows basic book conventions ▪ Recognises the title of a book ▪ Begins reading at the front of the book
Activity 4	Comprehension	TES1.1 ▪ Retells familiar text RES1.6 ▪ Recognises and recalls parts of texts that have been read to them
Activity 5	Concepts about print Phonics Reading texts Aspects of writing	RES1.6 ▪ Recognises that words are made up of letters ▪ Identifies capital letters in printed texts ▪ Recognises a sight word in text RES1.8 ▪ Identifies a full stop and knows its function ▪ Recognises letters of the alphabet WES1.9 ▪ Writes own name ▪ Groups letters into words ▪ Writes a single sentence (words may not be spelt correctly) WES1.12 ▪ Recognises the same letter in both lower case and upper case

Table 4.9 Best Start: Kindergarten literacy assessments

Best Start: Kindergarten assessment also includes a 'Best start literacy continuum' that indicates the expected learning prior to school (as detailed in Table 4.9 above), and then the expected learning along a continuum to the expected learning at the conclusion of the first year at school.

About the *Best Start: Kindergarten assessment*, the DET Curriculum Support website (NSW DETCSD 2008) states,

> The Best Start Kindergarten Assessment identifies the literacy and numeracy knowledge and skills that each child brings to school as they enter Kindergarten. It uses a continuum that is consistent with the English and Mathematics syllabus for the early years of schooling. This assessment informs the quality teaching and learning programs that schools implement in the early years of schooling.
>
> (NSW DETCSD 2008)

And also the 'Best Start: Literacy analysis booklet' (NSW DET 2007, p7) states,

> On entry to school any group of students will exhibit a range of abilities, experience and maturity levels.

And it also states that the assessment information,

> can be used to assist in planning programs to cater for the needs of students.
>
> (NSW DET 2007, p7)

The 'Best Start: Kindergarten literacy assessment' is a planned systematic process for identifying the skills of kindergarten children on entry to school that has drawn from evidence across a range of large-scale international studies and Australian studies of young children's literacy development. The aspects of literacy being assessed, as outlined in Table 4.9, include many of the emergent literacy skills that are discussed throughout this inquiry and that have been shown to affect later success in literacy at school. Assessments in these areas will provide:

- valuable information to inform teaching and learning programs;
- support for identified children; and,
- feedback for parents and carers.

What is clearly absent in this latest policy document and initiative is any reference to the techno-literacies that children bring to school and indeed its role in learning to be literate or numerate in formal schooling.

Summary

Despite the extensive research in print and paper-based literacies, and techno-literacies, as Beavis (2002, p47) claims, "definitions of literacy, particularly as they are enacted in curriculum and assessment policies and in schools, for the most part remain largely print-based". School programming and classroom teaching and learning programs in NSW schools are based upon the guidelines in curriculum documents developed between 1991 and 2002 with a slightly revised version of the *English K-6 Syllabus* in 2007. Techno-literacies are included to some degree in the teaching syllabuses, however, guidelines for entry to school assessments make no mention of techno-literacies. Therefore, if these assessments are not mandated, they will rarely be assessed on entry to school.

The *Best Start: Kindergarten assessment* that was developed in 2007 for implementation in NSW schools over three years from 2008, in literacy, includes only aspects of speaking, writing, reading texts, comprehension, concepts about print, vocabulary, phonics and phonemic awareness.

With this being the only assessment tool for implementation on entry to school, kindergarten children's techno-literacies will not only remain unknown, they remain less valued. Building upon children's *'funds of knowledge'* as they embark upon their first year at school, one would hope in today's world of new technologies, requires assessment of techno-literacy practices and skills, as well as assessment in print and paper-based literacies. *The Best Start: Kindergarten assessment* (NSW DET 2007, p2) states, "[i]t will recognise that children come to school with varied strengths, experiences and needs and from diverse communities and cultures". The assessments included in the package clearly do not include techno-literacies and, thus, it can be argued, present a message that these skills are not important or valued at school.

On the other hand, the NSW DET document *Our Young Learners: Giving them the best possible start,* recognises, "the increasing use of new technologies will provide students and teachers with greater flexibility in how and where learning occurs" (NSW

DET 2006a, p11). Furthermore, it has a focus on highly connected networks, expanding existing ICT for students, staff and parents and increasing secure online access to information and resources. This document also recognises the need to, "undertake research to identify the impact of prior to school learning experiences on the learning outcomes of early years' students" (NSW DET 2006a, p7). This document, however, is less likely to have the impact for teachers of children in their kindergarten year as *Best Start* will have.

It is clear from the analysis of the various documents that frame, guide and dictate what is to be taught in literacy in the early years of schooling for NSW children that references to the use of technology and techno-literacy skills is, indeed, rather limited. Where references are made, they seem to be almost as afterthoughts. There is certainly a stronger emphasis on print and paper-base literacy.

The research in this inquiry, as recommended in *Our Young Learners: Giving them the best possible start,* will include the impact of techno-literacies on our young learners in their homes in that most important first year at school. Schools will then be better equipped to build on children's *'funds of knowledge'* not only in print and paper-based literacy experiences and practices, but also in techno-literacies.

The following chapter, Chapter Five, will present the findings of the initial phase of this inquiry, the survey of the kindergarten parents at three Sydney metropolitan schools.

Chapter Five

Understanding the Context of the School Stories

Chapter Five

Understanding the Context of the School Stories

Initial Phase: Survey using Written Questionnaires

In Chapter Three of this thesis, the methodology used to gather data from both the initial and immersion phases of the research was outlined. This chapter presents the findings from the initial phase; survey using written questionnaires.

The purpose of the written questionnaire is to establish trends at three Sydney metropolitan schools of multiliterate practices of 123 kindergarten children in their homes. The results of the questionnaire are analysed to specifically establish these trends in relation to the socioeconomic background and gender of the children at the three schools.

The survey findings are presented in tables and graphs in several categories:

- The three schools combined;
- As separate schools - Schools 1, 2 and 3; and,
- According to gender.

This inquiry is executed at three schools in the Sydney metropolitan area. Although, geographically, the three schools are within a twenty kilometre radius of each other, the schools are situated in three diverse suburbs. Within the families in each of these suburbs, there is also a diversity of background - race, indigineity, cultural background, language, family structure, life experience, and work and leisure activities.

School 1 is situated in a quiet area away from main highways and consists mainly of large expensive private separate homes; many of which are set among the bushland with views of the bay. A couple of blocks of townhouses and villas have been developed over recent years to accommodate couples with children no longer living at home. There is no rail access. Within this suburb, there are two corner stores, a small shop near the bay, a yacht club, a parkland and the local public primary school.

Census (Australian Bureau of Statistics 2006) figures confirm a high socioeconomic population.

School 2 is situated in a busy semi-industrial suburb with a major highway separating industries, shops, private homes and blocks of units. Strip development lines both sides of the highway. There is an established shopping area in one of the main adjoining streets, and sporting fields adjacent to the highway. There is a rail link to the inner city. The suburb's primary and high school are both public schools. Private homes are mainly well established, small and modest. There are both well established blocks of units and new developments.

Census (Australian Bureau of Statistics 2006) figures confirm a socioeconomic population that is relatively comparable with NSW and Sydney. This population at School 2, though, is not as high a socioeconomic population as School 1.

School 3 is situated in a busy suburb providing the major business facilities for surrounding suburbs, a shopping area including restaurants, an entertainment centre, a library, council buildings, major sporting complexes, a private school and two primary schools. One of these primary schools caters for students with special learning needs. The suburb also provides a major rail link for commuters travelling to the inner city for work and, therefore, there are numerous well established blocks of units and flats and many new unit and town-house developments. Family homes are small, modest and well established.

Census (Australian Bureau of Statistics 2006) figures confirm a socioeconomic population relatively comparable on some criterion with other areas of Sydney and NSW and with School 2 but with a far higher percentage of persons living in dwellings other than separate houses, and a higher percentage of one parent families.

In comparing the three schools in this inquiry using the census information, School 1 is situated in a high socioeconomic area, with Schools 2 and 3, being situated in lower socioeconomic areas than School 1.

The return rate of the 123 written questionnaires ranged between 26% and 75%. The lowest return of 26% was from the parents of the girls at School 2 while the highest return of 75% was from the parents of the girls at School 3. In total across the three

schools, the return rate of surveys was 53% (refer to Table 3.2 on p71 for further details).

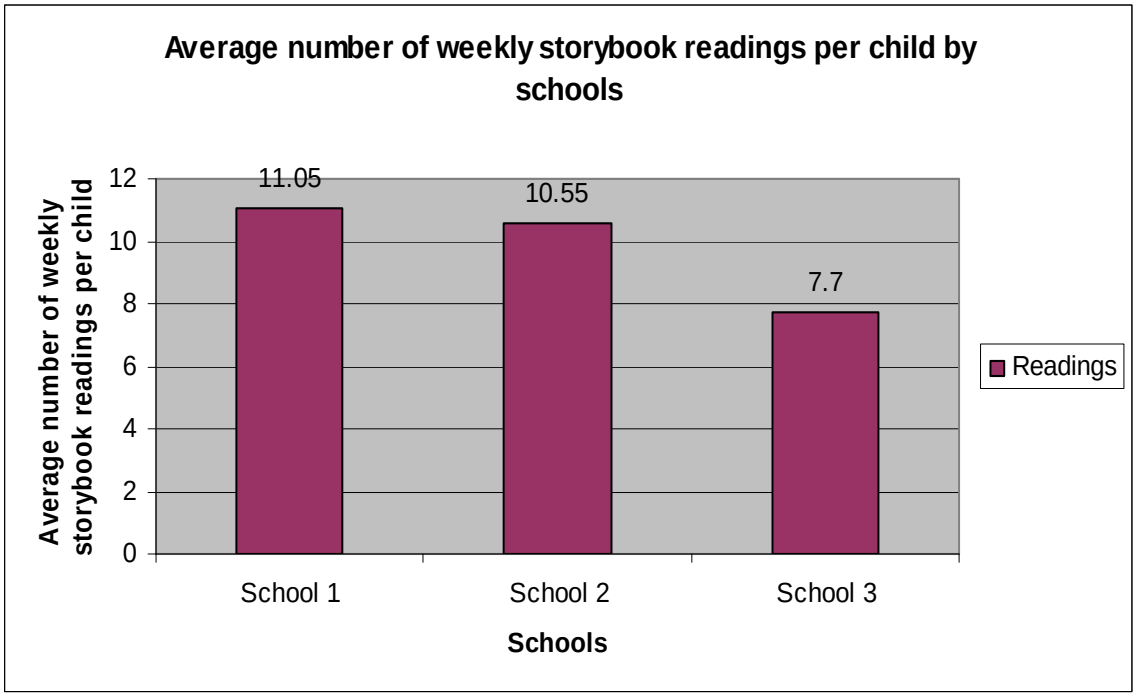
Question 1 - Storybook reading

Question 1 focused on 'Storybook reading'. It comprised several parts. Parents were first asked to indicate whether or not they read to their children. If their response was 'yes', they were asked to indicate how often they read to their children in a typical week, and whether this occurred at bedtime or at other times during the day. They were also asked if, and how often, other family members read to their children.

All parents who completed the questionnaire indicated that they read to their children, except for a parent of a boy at School 1 and a parent of a girl at School 3.

Average number of weekly storybook readings per child by schools

Graph 5.1 shows the average weekly storybook readings per child, to the children at the three schools.



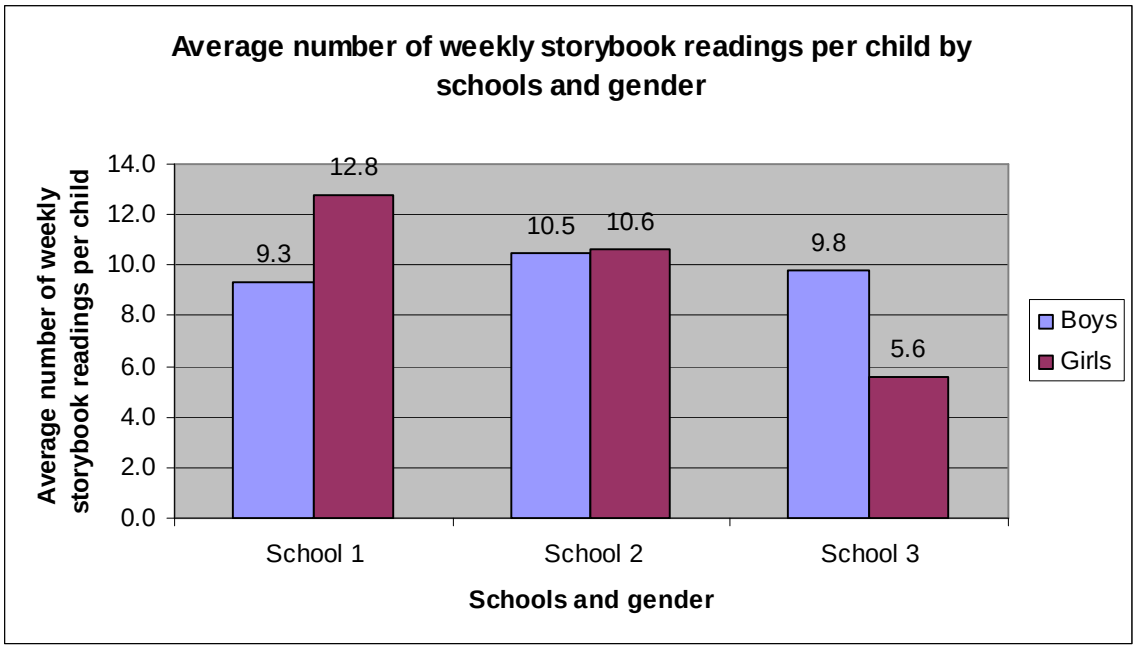
Graph 5.1 Average number of weekly storybook readings per child by schools

When combining storybook reading by parents and other family members, an analysis of all responses indicated fairly comparable results for the children at

Schools 1 and 2, while the children at School 3 were read to less often than the children at either of the other two schools.

Average number of weekly storybook readings by schools and gender

Graph 5.2 shows the average number of times each week in each school that boys and girls have a storybook read to them by someone in the family.



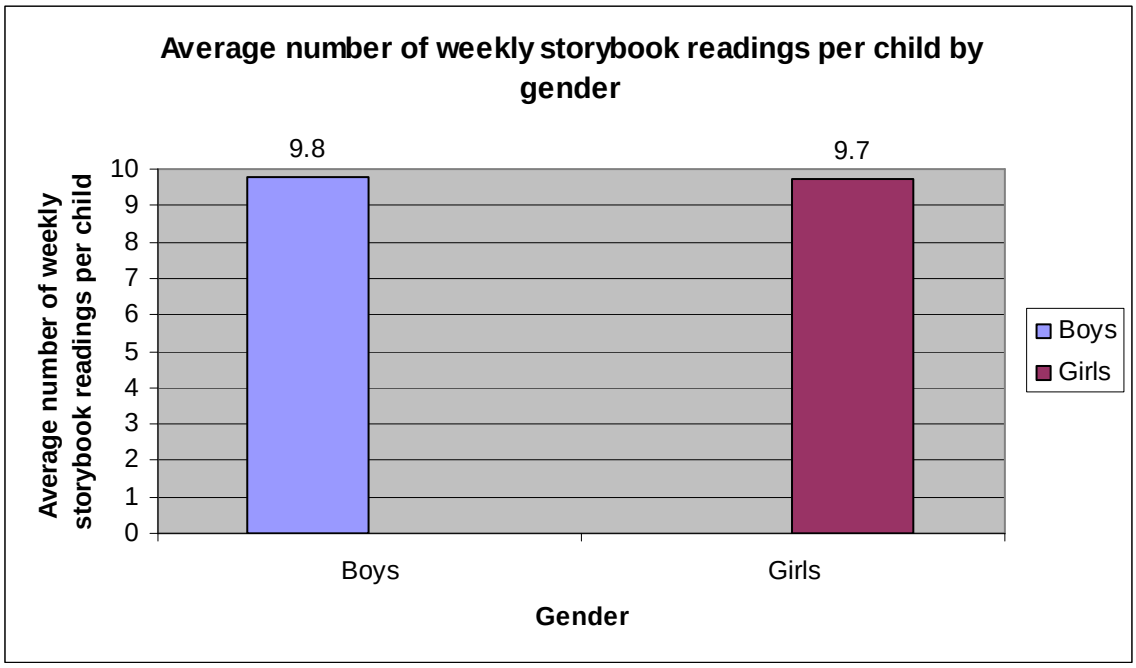
Graph 5.2 Average number of weekly storybook readings by schools and gender

When comparing gender differences at the three schools, an analysis of data indicated that parents of girls from School 1 read more often each week to their girls than parents of boys. Storybook reading at School 2 was comparable for both boys and girls while parents of boys at School 3 read more frequently to their boys. Interestingly, while parents at School 3 (Graph 5.2) read less to their children compared to parents at Schools 1 or 2, they read more frequently to their boys than their girls in contrast to parents at Schools 1 and 2.

The girls from School 1 were read to 12.8 times a week with the girls from School 3 being read to only 5.6 times per week. The girls from School 1 were read seven more books each per week on average, which equates to one extra book read per day to each girl in School 1 compared to the girls in School 3. Results for readings to boys were comparable across all three schools.

Average weekly number of storybook readings per child by gender

The graph below shows the average weekly storybook readings to all of the children in the three schools by gender alone.



Graph 5.3 Average number of weekly storybook readings per child by gender

When the data from the three schools were analysed, there was minimal difference between the average weekly storybook readings to boys and girls at the three schools.

Summary of Question 1

Almost all parents indicated that family members and themselves regularly read to their children at bed-time and at other times of the day. These results indicate that children in these schools are being read to, at least once a day, by a parent or other member of the family.

Differences did exist, though, across the three schools. However, it needs to be taken into account that the number of returned questionnaires from School 3 was small (n=13).

When comparing the average weekly storybook readings by schools and gender, the boys at School 1 were read to 3.5 less times than the girls. Results for boys and girls at School 2 were very similar (10.5 for boys; 10.6 for girls). At School 3, the boys were read to 4.2 more times each week than the girls.

Despite these differences at the individual schools, the results when gender alone is compared show minimal difference between weekly storybook readings to boys and girls across the three schools (9.8 for boys; 9.7 for girls).

Question 2 – Storybook reading related activities

In Question 2, parents were asked to indicate, when reading to their children, whether or not they participated in storybook reading related activities. If they responded 'yes' to this question, they were asked to indicate the frequency of participating in any of the following storybook related activities:

- discussing pictures;
- discussing meanings of words;
- focusing on the words while reading;
- focusing on the letters to sound out words; and,
- discussing rhyme.

Storybook reading related activities by schools

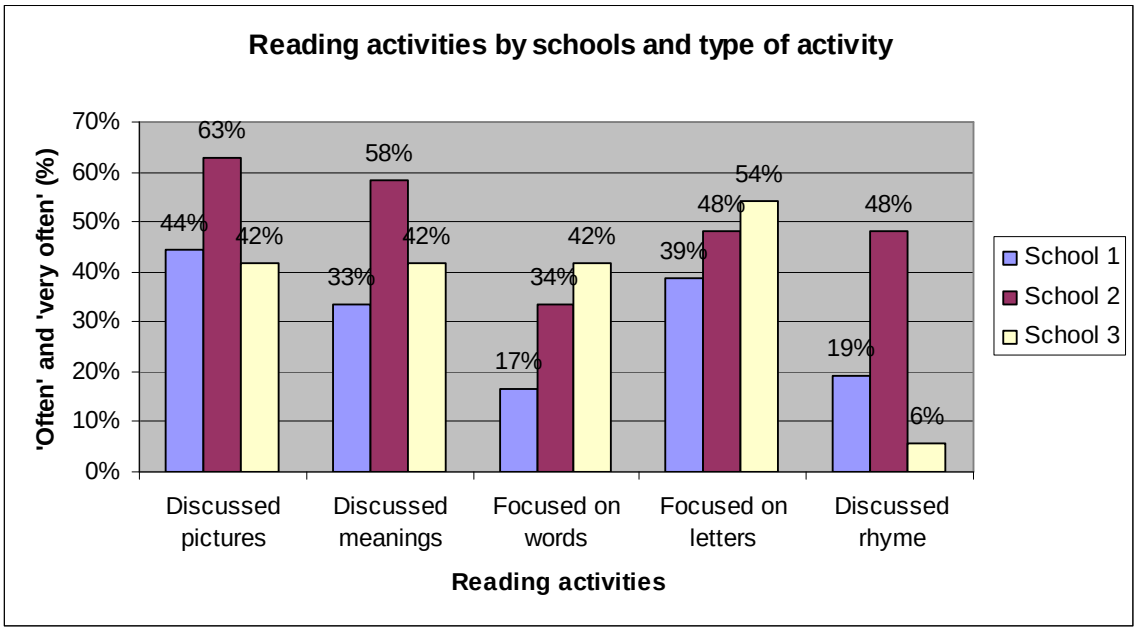
Table 5.1 indicates the percentage mean of the three schools for each of the reading activities.

Reading Activity	*Mean*
Discussed pictures	50%
Discussed meanings of words	45%
Focused on words	31%
Focused on letters	47%
Discussed rhyme	24%

Table 5.1 Mean reading activities

Table 5.1 shows that more parents at the three schools *discussed the pictures* with their children (average across the 3 schools of 50%) than any other storybook reading related activity and that twice as many parents *discussed pictures* (50%) compared to the number of parents who *discussed rhyme (24%). Discussing rhyme* was, therefore, the least practised storybook related reading activity.

Graph 5.4 indicates by schools, the percentage of parents who participated in each of the above storybook reading related activities.



Graph 5.4 Reading activities by schools and type of activity

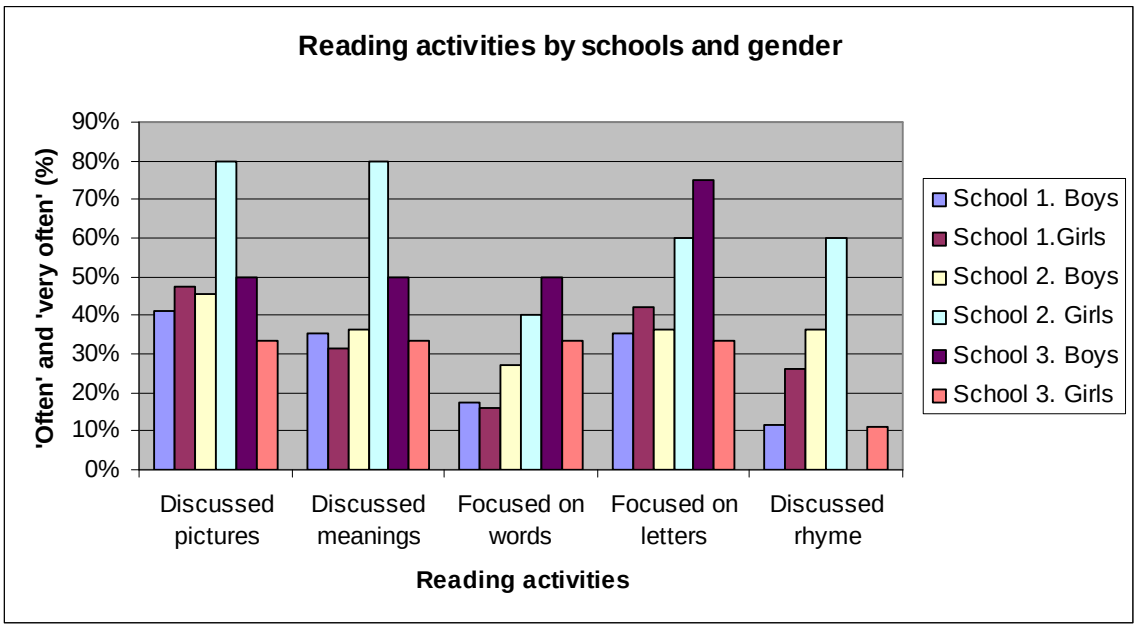
Except for *discussing rhyme,* fewer parents at School 1 participated in any of the storybook reading related activities compared to parents at the other two schools. More parents at School 2 *discussed pictures, discussed meanings of words and discussed rhyme* than other parents, whereas, more parents at School 3 *focused on words and focused on letters* than at Schools 1 and 2. Only 6% of parents at School 3 participated in the least common storybook reading related activity of *discussing rhyme.*

Storybook reading related activities by schools and gender

Table 5.2 and Graph 5.5 (the table and graph have been separated as there is too much data to clearly display the results on the graph alone) show the percentage of parents' storybook reading related activities by both schools and gender.

	School 1 Boys	*School 1 Girls*	*School 2 Boys*	*School 2 Girls*	*School 3 Boys*	*School 3 Girls*
Discussed pictures	41%	47%	46%	80%	50%	33%
Discussed the meanings of words	35%	32%	36%	80%	50%	33%
Focused on words	18%	16%	27%	40%	50%	33%
Focused on letters in words	35%	42%	36%	60%	75%	33%
Discussed rhyme	12%	26%	36%	60%	0%	11%

Table 5.2 Reading activities by schools and gender



Graph 5.5 Reading activities by schools and gender

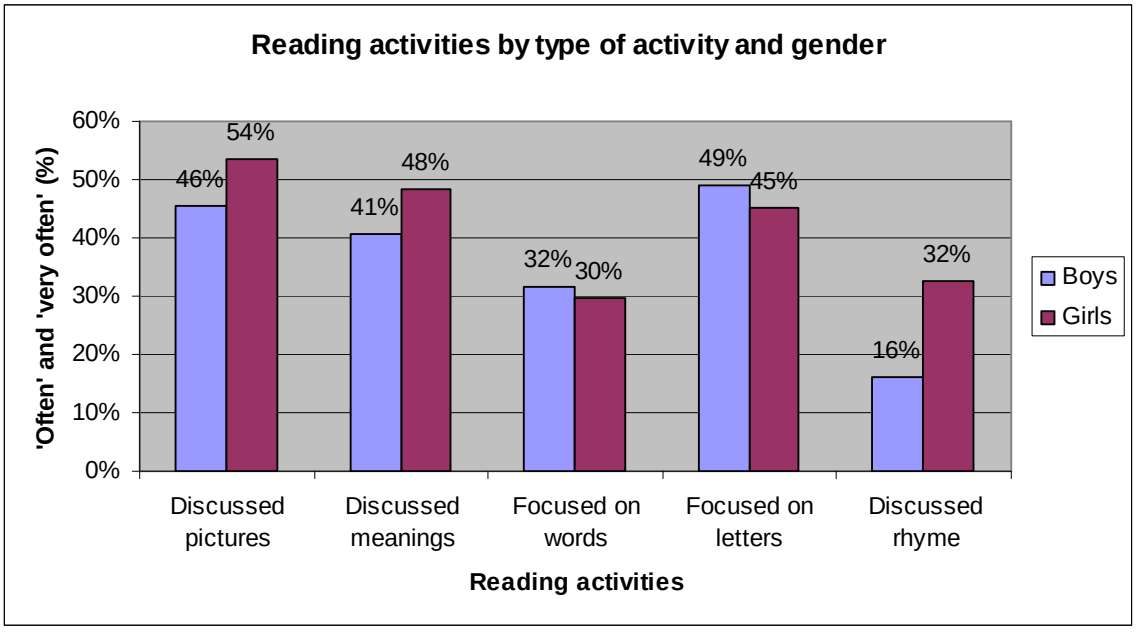
There was a wide range of storybook reading related activities for boys and girls at the three schools.

At School 1, results for both boys and girls were fairly comparable across all storybook reading related activities except *discussing rhyme* with twice as many parents of girls *discussing rhyme* compared to parents of boys.

Apart from the 75% of parents of boys at School 3 who *focused on the letters*, the parents of the girls at School 2 participated in all activities; *discussing pictures, discussing the meanings of words, focusing on letters and discussing rhyme* more than any other group. Also at School 2, parents of girls participated in all activities more than parents of boys. At School 3, except for *discussing rhyme,* parents of boys participated in all activities more than parents of girls. No parents of the boys at School 3 *discussed rhyme.*

Reading activities by type of activity and gender

Graph 5.6 shows the percentage of parents, by the gender of their children, who participated in reading activities.



Graph 5.6 Reading activities by type of activity and gender

More parents of girls *discussed pictures, discussed meanings of words* and *discussed rhyme* than parents of boys. Approximately the same number of parents of boys and girls *focused on the words.* More parents of boys *focused on the letters in words* than parents of girls.

Summary of Question 2

When reading storybooks to their children all parents indicated that family members and/or themselves participated in storybook reading related activities. Differences existed, though, among the types of activities, schools and gender.

Parents' responses indicated that they *discussed pictures* and *meanings* and *focused on letters* more often than they *focused on words* or *discussed rhyme.* Almost a half of parents (47%) indicated that they also *focused on the letters,* whereas, only 24% indicated that they *focused on rhyme.*

School 1 ranged from 44% of parents *discussing pictures* to 19% of parents *discussing rhyme*; School 2 ranged from 63% of parents *discussing pictures* to 34% of parents *focusing on words* but the greatest difference existed at School 3 where 50% of parents *discussed pictures* while only 6% *discussed rhyme.*

In comparing gender differences in reading activities, parents of girls (33%) *discussed rhyme* more than twice as often as parents of boys (16%) while on all other reading activities there was no more than 8% difference between parents of boys and girls.

Question 3 - Children's reading initiatives

In Question 3, parents were asked to indicate whether or not their children initiated any reading activities. If they responded 'yes', parents were asked to indicate how often their children initiated any of the following reading activities:

- Asks to be read to;
- Reads to him/herself;
- Reads to others;
- Memorises books; and,
- Asks for favourite books to be read.

The findings are presented overleaf.

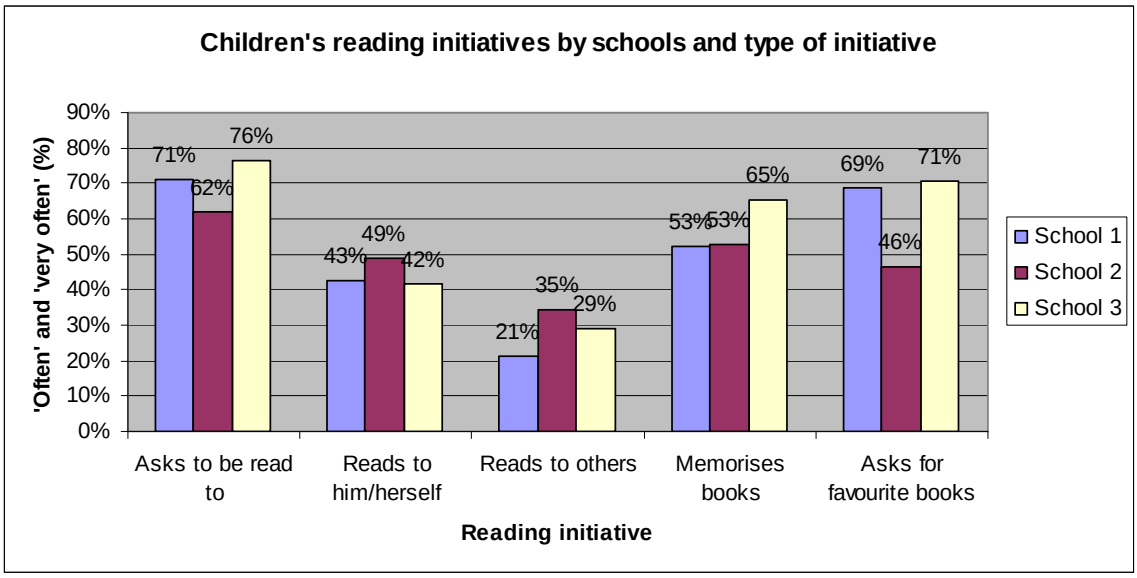
Children's reading initiatives by schools and type of initiative

Table 5.3 shows the percentage mean of reading initiatives of all children at the three schools.

Reading initiative	*Mean*
Asks to be read to	70%
Reads to him/herself	45%
Reads to others	28%
Memorises books	57%
Asks for favourite books	62%

Table 5.3 Mean of children's reading initiatives

Parents indicated that *asking to be read to* (av.70%) was the most frequent initiative by children at all three schools and *reading to others* (av.28%) was the least frequent initiative by the children at the three schools. Parents also indicated that children *asked to be read to* more than twice as often as they *read to others* but almost half of the children (45%) *read to themselves.* Graph 5.7 indicates the percentage of children at each of the schools who initiated the various reading activities.



Graph 5.7 Children's reading initiatives by schools and type of initiative

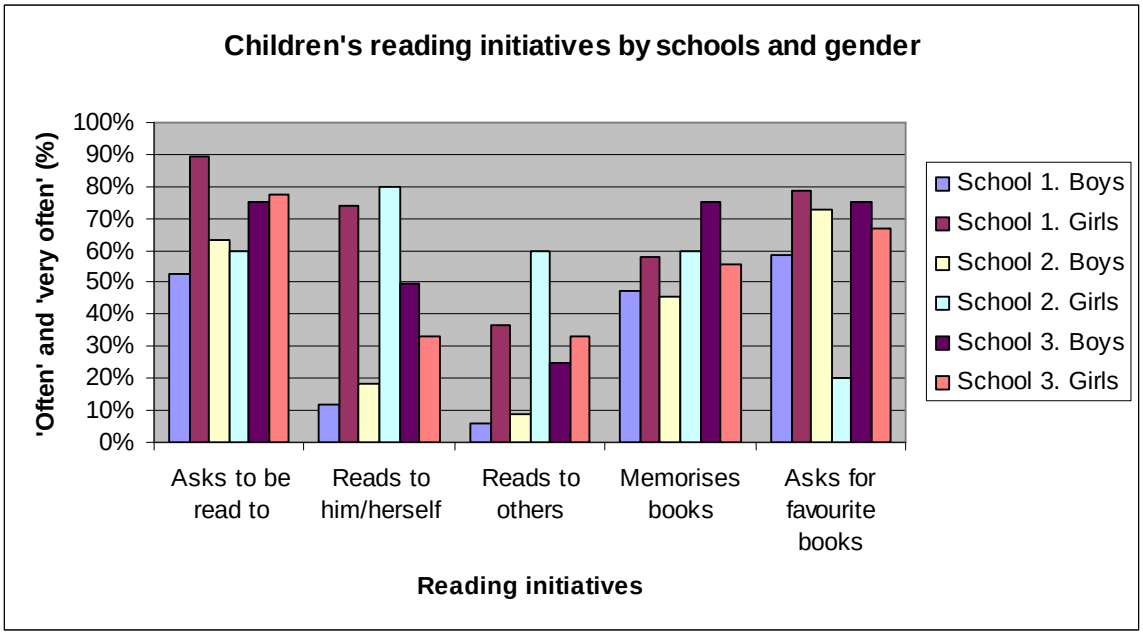
The greatest difference in reading initiatives was *asking for favourite books to be read* with only 46% of children at School 2 compared to 69% at School 1, and 71% at School 3. Parent responses, for all other reading initiatives at the three schools were fairly comparable.

Children's reading initiatives by schools and gender

The findings below and overleaf are presented in tabular and graph forms as the data is not able to be clearly displayed on the graph alone.

	School 1 Boys	*School 1 Girls*	*School 2 Boys*	*School 2 Girls*	*School 3 Boys*	*School 3 Girls*
Asks to be read to	53%	90%	64%	60%	75%	78%
Reads to him/herself	12%	74%	18%	80%	50%	33%
Reads to others	6%	37%	9%	60%	25%	33%
Memorises books	47%	58%	46%	60%	75%	56%
Asks for favourite books to be read	59%	79%	72%	20%	75%	67%

Table 5.4 Children's reading initiatives by schools and gender



Graph 5.8 Children's reading initiatives by schools and gender

There were marked differences in children's reading initiatives when comparing schools and gender. Parents indicated that the girls at School 1 initiated all reading activities more than the boys at School 1, with the greatest difference existing in *reading to themselves* and *reading to others*. The girls at School 1 (74%) *read to themselves* more than six times as often as the boys (12%). The girls at School 1 (37%) also *read to others* more than six times as often as the boys (6%).

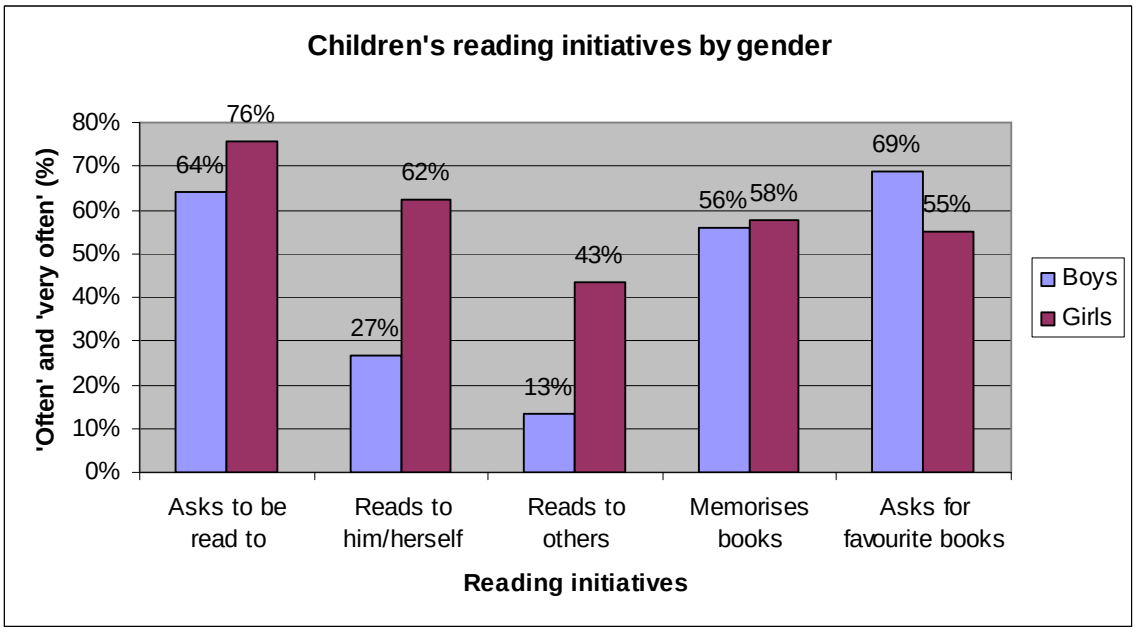
At School 2, the girls (80%) *read to themselves* more than four times as often as the boys (18%) and the girls at School 2 (60%) *read to others* more than six times as often as the boys (9%). The girls at School 2 (60%) also *memorised books* more than the boys (46%). Boys, however, *asked for books to be read* (64%) and *asked for favourite books* (72%) more than the girls (60% and 20% respectively).

At School 3, reading initiations between boys and girls were less marked with boys initiating *reading to themselves, memorising books* and *asking for favourite books to be read* more than girls, and girls initiating *asking to be read to* and *reading to others* more than the boys.

More girls in School 1 *asked to be read to* and *asked for favourite books to be read,* than the boys and girls at either of the other two schools. More girls in School 2 *read to themselves* than the boys and girls at the other two schools.
Fewer boys at School 1 *read to themselves* and *read to others* than any boys or girls at Schools 2 or 3.

Children's reading initiatives by gender

Graph 5.9 shows the percentage of children's reading initiations of each of the activities by gender.



Graph 5.9 Children's reading initiatives by gender

Once again there were marked differences when comparing gender alone with the greatest difference occurring with *reading to themselves* and *reading to others.* More than twice as many girls (62%) as boys (27%) *read to themselves* and more than three times as many girls (43%) as boys (13%) *read to others.* Parents indicated that their girls initiated all reading activities more than the boys except *asking for favourite books to be read*.

The boys (69%) *asked for favourite books to be read* more than the girls (55%), however, the girls *asked to be read to* (76%) more than the boys (64%). Interestingly, if these percentages are combined, as both of the activities include 'being read to', there was only 1% difference overall in boys and girls *asking to be read to*, when *asking for favourite books to be read* is included.

Summary of Question 3

Parents indicated that their children initiated all of the reading activities listed. There were differences, though, in the frequency of the listed activities with *asking to be read to, asking for favourite books to be read* and *memorising books* being initiated more than twice as often as *reading to others*. It was apparent, though that even at a young age, children chose to *read to themselves,* and they *read to themselves* more

than half as often as they *asked to be read to, or asked for favourite books to be read.*

When comparing schools, the parents indicated that children at School 3 initiated three of the five activities more than children at Schools 1 or 2. Children at School 2 initiated the other two activities more than the children at School 1.

When comparing schools and gender, large differences in initiating reading activities existed between the boys and girls, especially at Schools 1 and 2. At School 1, girls initiated all activities more than the boys; at School 2, the girls initiated three activities more than the boys and at School 3, boys initiated three activities more than the girls.

The most noticeable differences existed between boys and girls at Schools 1 and 2 in initiating *reading to themselves* and *reading to others* where the girls initiated both of these activities four to six times as often as boys while boys at School 2 *asked for favourite books to be read* more than the girls.

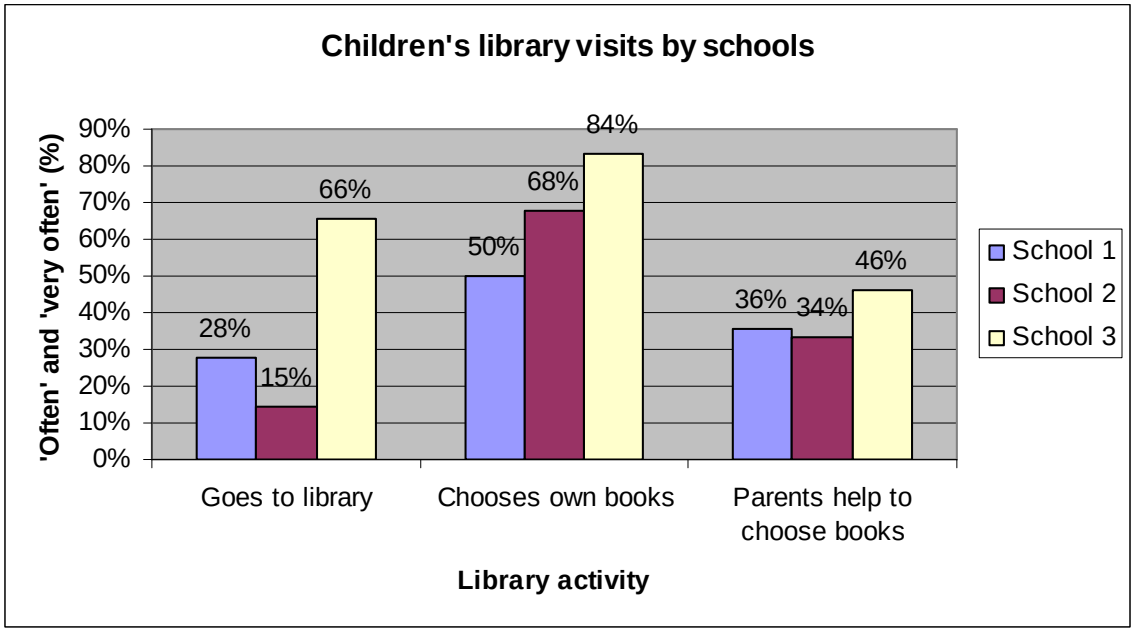
When comparing the reading initiatives by gender alone, girls initiated all reading activities, except for *asking for favourite books to be read* more than the boys.

Question 4 - Library visits

In Question 4, parents were asked to indicate whether or not they took their children to visit the local library. If parents answered 'yes', they were asked to indicate the frequency of library visits. When visiting the library, parents were also asked to indicate whether or not they encouraged their children to choose their own library books and whether or not they helped their children to choose appropriate books.

Children's library visits by schools

Graph 5.10 (overleaf) indicates the percentage of parents from each school who took their children to the library, encouraged children to choose their own books and/or assisted their children to choose appropriate books.



Graph 5.10 Children's library visits by schools

The greatest difference existed among schools in *taking their children to the library* with the parents at School 3 (66%) *taking their children to the library* more than twice as often as parents from either School 1 (28%) and more than four times as often as parents at School 2 (15%). Parents at School 3 also encouraged their children to *choose their own books* and assisted them to *choose appropriate books* more often than parents from either of the other two schools.

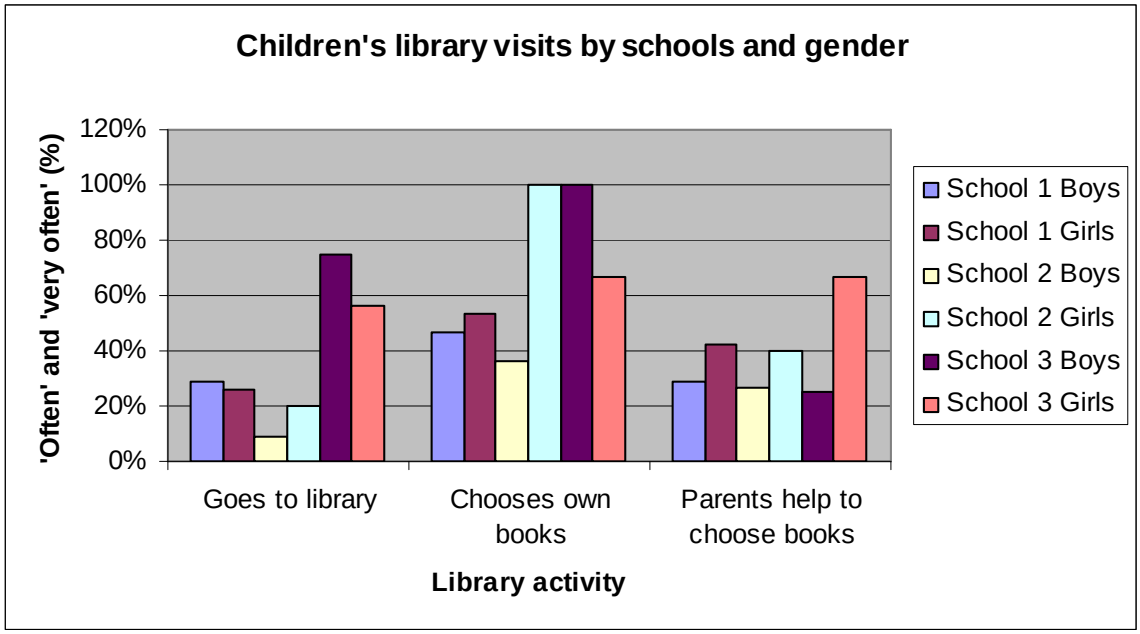
The parents at School 1 *took their children to the library* more often than parents at School 2. They assisted their children to *choose appropriate books* marginally more than parents at School 2, however, parents at School 1 did not encourage their children to *choose their own books* as often as parents at School 2.

Children's library visits by schools and gender

The following results have been presented in both tabular and graph form (overleaf) and indicate children's library visits by schools and gender.

	School 1 Boys	*School 1 Girls*	*School 2 Boys*	*School 2 Girls*	*School 3 Boys*	*School 3 Girls*
Child goes to the library	29%	26%	9%	20%	75%	56%
Child chooses own books	47%	53%	36%	100%	100%	67%
Parent helps to choose appropriate books	29%	42%	27%	40%	25%	67%

Table 5.5 Children's library visits by schools and gender

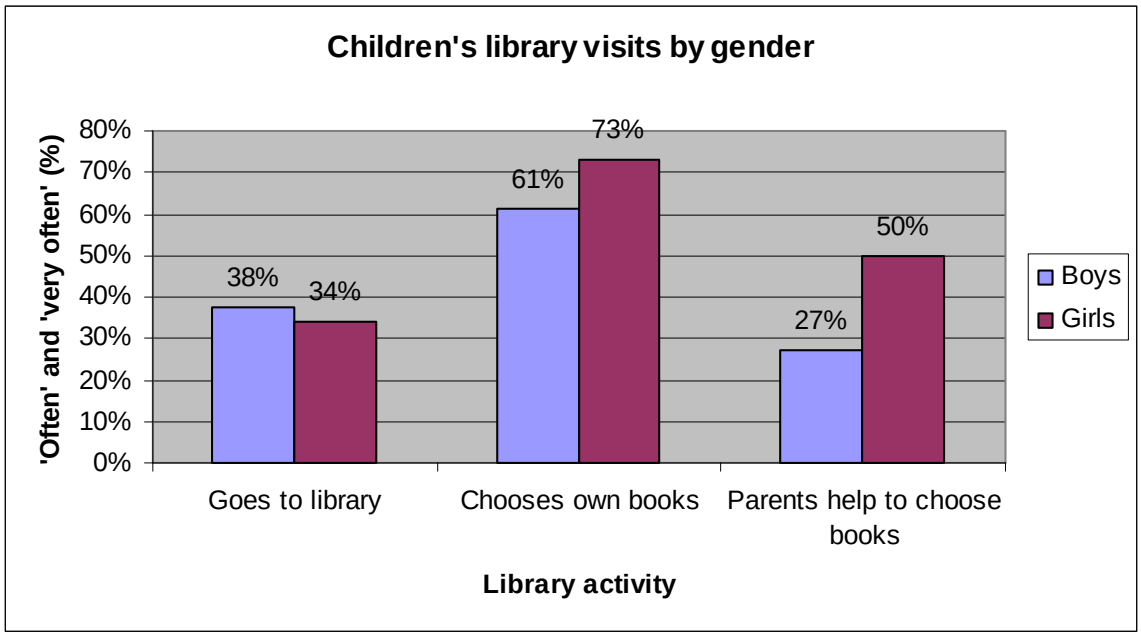


Graph 5.11 Children's library visits by schools and gender

In comparing schools and gender, far more parents at School 3 *took both their boys and girls to the library* than parents at either of the other two schools. The greatest difference was between the parents of boys at School 3 (75%) compared to parents of boys at School 2 (9%).

At School 1, 47% of boys *chose their own books* compared to 53% of girls. At School 2, 36% of boys compared to 100% of girls *chose their own books*, while at School 3, 100% of boys compared to 67% of girls *chose their own books.* At Schools 1, 2 and 3, more parents helped their girls *choose appropriate books* compared to their boys.

Children's library visits by gender



Graph 5.12 Children's library visits by gender

When comparing library visits by gender alone, parents took their boys (38%) to the library only marginally more often than they took their girls (34%), however, parents encouraged their girls (73%) to *choose their own books* more often than their boys (61%). Parents also assisted their girls (50%) to *choose appropriate books* almost twice as often as they assisted their boys (27%).

Summary of Question 4

Only 36% of parents across the three schools indicated that they *took their children to visit the local library.* Of those parents who indicated that they took their children to visit the local library, 67% of parents encouraged their children to *choose their own books* while only 39% of parents assisted their children to *choose appropriate books*.

In comparing schools, the parents at School 3 *took their children more often to visit the local library* and also encouraged their children more to *choose their own books* and assisted them more to *choose appropriate books.*

In comparing schools and gender, parents of both boys and girls at School 3 *took their children more often to the library* while only 9% of boys at School 2 were *taken to the library.* Parents of girls at School 2 and boys at School 3 encouraged their

children to *choose their own books* more than any other group. Parents of girls at School 3 assisted them to *choose appropriate books* more often than any other group.

In comparing library visits by gender alone, results were fairly comparable between boys and girls in both *visiting the library* and being encouraged to *choose their own books,* however, parents assisted their girls to *choose appropriate books* almost twice as often as they assisted their boys.

Question 5 - Child's home library

In Question 5, parents were asked if their children had their own libraries of books, magazines or comics at home and if parents responded 'yes', they were asked to indicate the number of items in their children's libraries.

All children except one girl from School 1 and one boy from School 2 had their own library of books, magazines or comics at home. Of these children, 48% owned more than 60 books, magazines or comics in their own home library. The contents of children's home libraries came from a variety of sources including hand-me-downs, gifts and purchases from stores and second-hand book stalls.

Question 6 - Beginning reading

In Question 6, parents were asked to indicate the ages of their children when they were first read to, and the ages when their children began to pretend reading to themselves, or others.

Parents indicated that all children were first read to, between birth and three years of age, and children read to themselves, or others between the ages of one and five years.

Parents read to their girls at a younger age than they read to their boys. Parents read to girls under two years of age (38%), and boys (24%). Between one and two years of age, twice as many girls (30%) as boys (15%) pretended to read to themselves, or others.

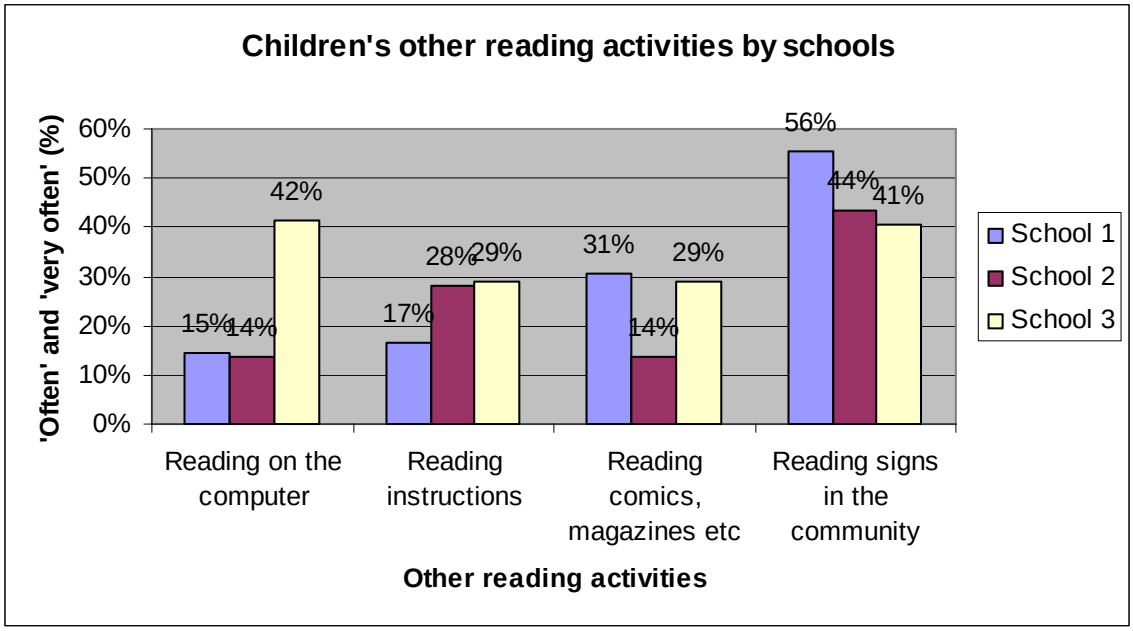
Question 7 – Children's other reading activities

In Question 7, parents were asked to indicate the frequency of their children's reading:

- on a computer;
- instructions for games, recipes, building equipment, videos, gameboys etc;
- other materials – advertisements, TV programs, comics, magazines etc; and,
- signs in the wider community.

Children's other reading activities by schools

Graph 5.13 indicates other reading activities children at the three schools participated in at home.



Graph 5.13 Children's other reading activities by schools

There were some marked differences in children's other reading activities with the children at School 3 *reading on the computer* almost three times as often as the children at Schools 1 or 2. The children at School 3 also *read instructions* more often than children from Schools 1 and 2, although there was minimal difference in the frequency of *reading instructions* between Schools 2 and 3.

The children at School 1 read comics and magazines more than children at Schools 2 or 3, although there was minimal difference in frequency of *reading comics and magazines* between School 1 and 3. Approximately half as many of the children at School 2 *read comics and magazines* compared to the children at Schools 1 and 3.

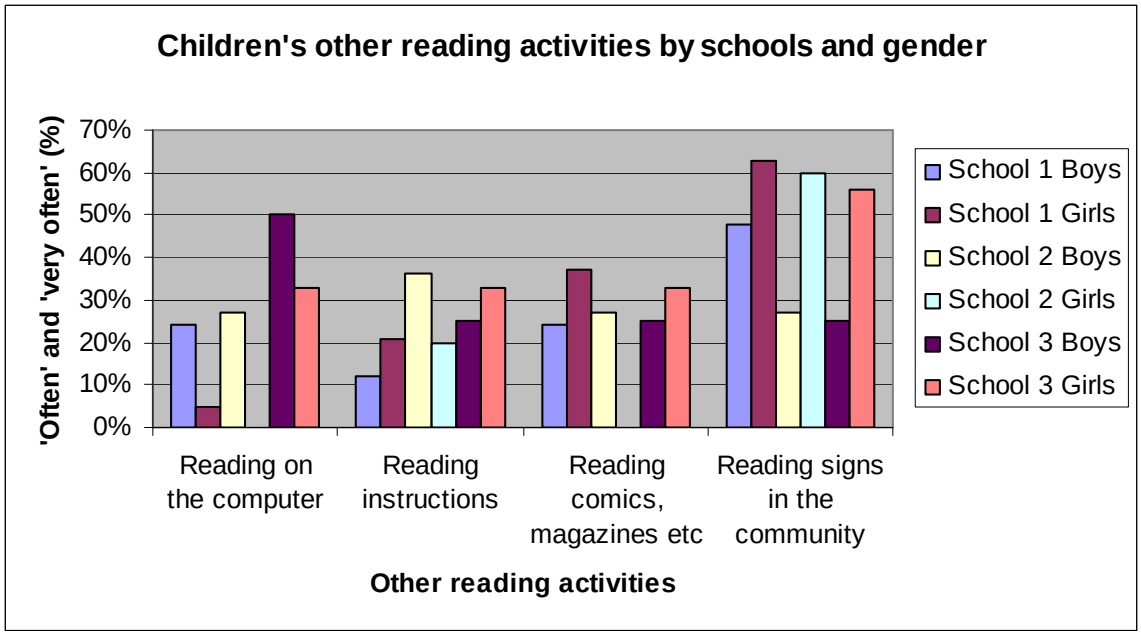
More children *read signs in the community* than any other reading activity with the children at School 1 *reading signs in the community* more often than children from Schools 2 or 3.

Children's other reading activities by schools and gender

Results in Table 5.6 and Graph 5.14 indicate children's other reading activities by schools and gender.

	School 1 Boys	*School 1 Girls*	*School 2 Boys*	*School 2 Girls*	*School 3 Boys*	*School 3 Girls*
Reading on the computer	24%	5%	27%	0%	50%	33%
Reading instructions	12%	21%	36%	20%	25%	33%
Reading comics, magazines etc.	24%	37%	27%	0%	25%	33%
Reading signs in the community	48%	63%	27%	60%	25%	56%

Table 5.6 Children's other reading activities by schools and gender



Graph 5.14 Children's other reading activities by schools and gender

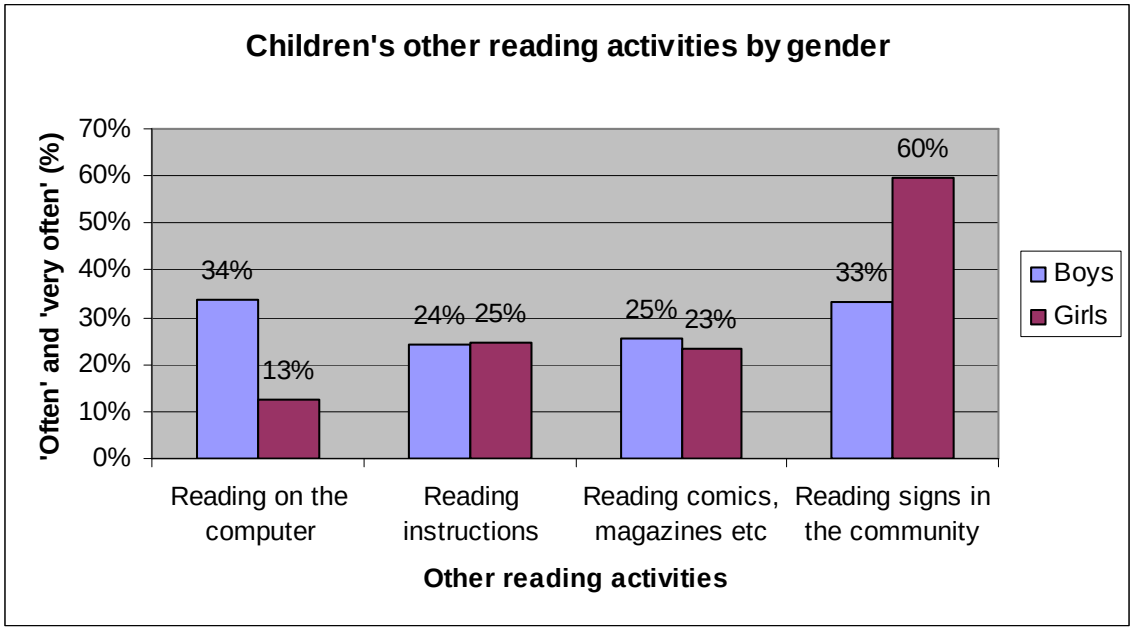
Boys at all schools *read on the computer* more than the girls. At School 1, the boys (24%) *read on the computer* almost five times more compared to the girls (5%). At School 2, 27% of boys *read on the computer* compared to the girls (0%), and at School 3 the boys (50%) *read on the computer* more compared to the girls (33%).

With *reading instructions*, results were mixed. Almost twice as many girls at School 1 (21%) *read instructions* compared to 12% of boys. At School 2, 36% of boys compared to 20% of girls *read instructions* while results between boys and girls at School 3 were fairly comparable with boys (25%) and girls (33%).

Once again the results with reading comics, magazines, etc. were mixed. At both Schools 1 and 3, the girls *read comics and magazines* more than the boys, however, at School 2 no girls *read comics, magazines* etc. while 27% of boys *read comics, magazines etc.*

More girls at each of the three schools *read signs in the community* compared to the boys. The greatest difference between girls' and boys' results were at School 2 with more than twice as many girls (60%) *reading signs in the community* compared to 27% of boys.

Children's other reading activities by gender



Graph 5.15 Children's other reading activities by gender

When comparing the results of children's other reading activities by gender alone, boys (34%) *read on the computer* more than twice as often as girls (13%), whereas girls (60%) *read signs in the community* almost twice as often as boys (33%).

Results between boys and girls in reading instructions (24%, 25% respectively) and reading comics, magazines etc. (25%, 23% respectively) were fairly comparable.

Summary of Question 7

Responses to this question demonstrated a marked difference in children's participation in other reading activities. Parents indicated that their children *read signs in the community* far more often than any of the other three reading activities. The results of the other three reading activities were comparable, with *reading on the computer* being judged as the least favoured activity.

At the three schools, the greatest difference in results was noted by School 3, where parents indicated the children *read on the computer* more than twice as often as children at either School 1 or 2.

When comparing results by schools and gender, large differences were noted between boys and girls on many activities. No girls at Schools 1 and 2 *read on the*

computer or *read comics, magazines etc*. and only 5% of girls at School 1 *read on the computer,* whereas results for boys were 27%, 27% and 24% respectively.

More than twice as many girls as boys at Schools 2 and 3 *read signs in the community* and almost twice as many girls as boys at School 1 *read instructions.*

When comparing results by gender alone, the largest differences between boys and girls was in *reading on the computer*, and *reading signs in the community,* with: boys *reading on the computer* more than twice as often as girls; and, girls *reading signs in the community* almost twice as often as boys.

Question 8 – Writing activities

Parents were asked to indicate the frequency of their children's writing activities including:

- writing their own name;
- writing others' names;
- writing letters and/or words;
- writing about events or possessions;
- writing pretend letters to others; and,
- using a word processor to write on the computer.

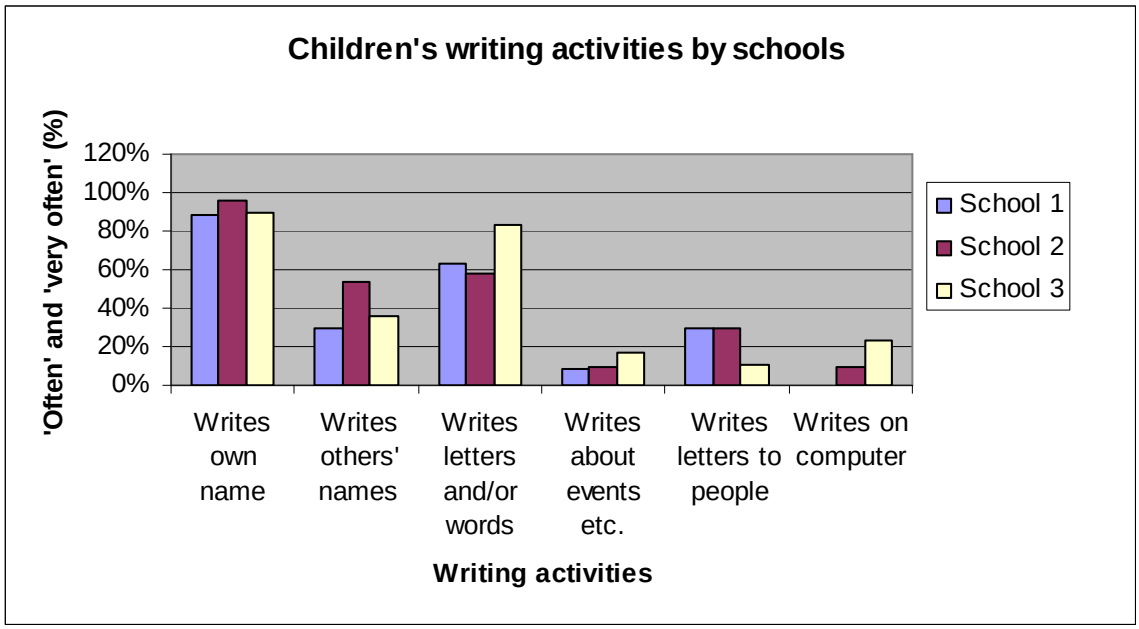
Children's writing activities by schools

Results of children's writing activities at the three schools are presented below in Table 5.7 (below) and Graph 5.16 (overleaf).

	School 1	*School 2*	*School 3*
Writes own name	88%	96%	89%
Writes others' names	29%	54%	36%
Writes letters and/or words	63%	58%	84%
Writes about events etc.	8%	10%	17%
Writes pretend letters to people	29%	30%	11%
Writes using	0%	10%	24%

computer			

Table 5.7 Children's writing activities by schools



Graph 5.16 Children's writing activities by schools

An analysis of the data indicated that results at the three schools on children *writing their own name* were fairly similar (88%, 96% and 89% respectively).

Differences did occur, though, on all other items with the greatest difference between schools occurring in *writing using the computer* where no children at School 1 *wrote using the computer,* 10% at School 2 and 24% at School 3 *wrote using the computer.*

Almost three times as many children at School 2 *wrote pretend letters to people* compared to children at School 3. More than twice as many children at School 3 *wrote about events or possessions* compared to children at School 1.

Least differences in schools were noted in *writing others' names* (range from 29% - 54%) and *writing letters or words* (range from 58% - 84%).

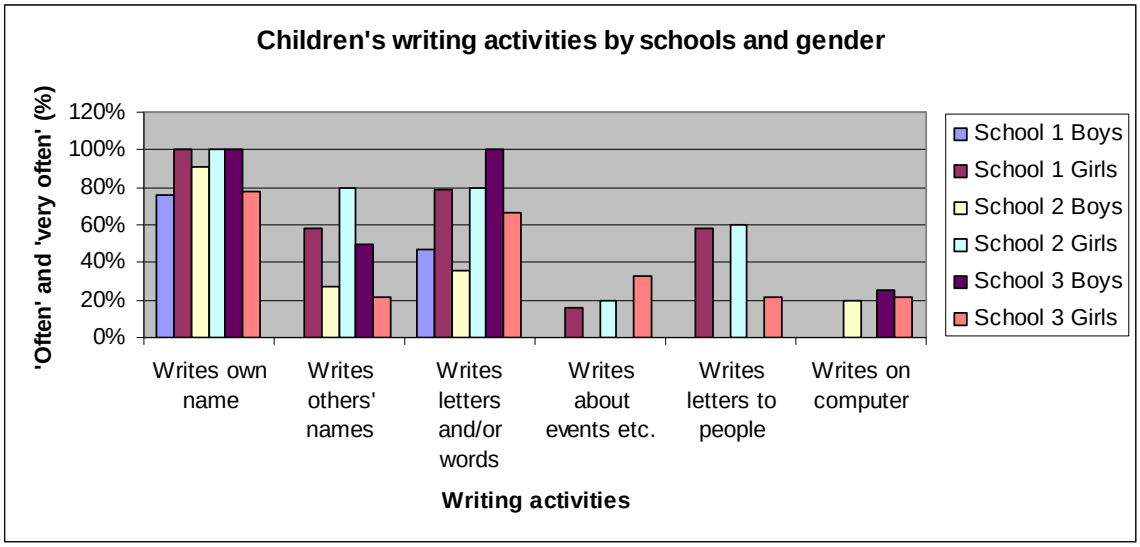
Children across the three schools *wrote about events and possessions* and *wrote on the computer* far less often than other listed writing activities.

Children's writing activities by schools and gender

Results of the children's writing activities by schools and gender are presented overleaf in Table 5.8 and Graph 5.17.

	School 1 Boys	*School 1 Girls*	*School 2 Boys*	*School 2 Girls*	*School 3 Boys*	*School 3 Girls*
Writes own name	76%	100%	91%	100%	100%	78%
Writes others' names	0%	58%	27%	80%	50%	22%
Writes letters and/or words	47%	79%	36%	80%	100%	67%
Writes about events etc.	0%	16%	0%	20%	0%	33%
Writes pretend letters to people	0%	58%	0%	60%	0%	22%
Writes using computer	0%	0%	20%	0%	25%	22%

Table 5.8 Children's writing activities by schools and gender



Graph 5.17 Children's writing activities by schools and gender

Parents indicated that all girls at Schools 1 and 2 and all boys at School 3 *wrote their own names* while 76% of boys at School 1, 91% of boys at School 2 and 78% of girls at School 3 *wrote their own names.*

Parents also indicated similar results for *writing others' names* with more girls at Schools 1 and 2 and more boys at School 3 *writing others' names.* At School 1, 58% of girls *wrote others' names* compared to no boys. More than three times as many girls at School 2 *wrote others' names* compared to boys while at School 3, more than twice as many boys *wrote others' names* compared to girls.

The same trend occurred with *writing letters and/or words* with; the girls at Schools 1 and 2 (79% and 80% respectively) *writing letters and/or words* more than the boys (47% and 36% respectively); and, the boys at School 3 (100%) *writing letters and/or words more* than the girls (67%). at the three schools.

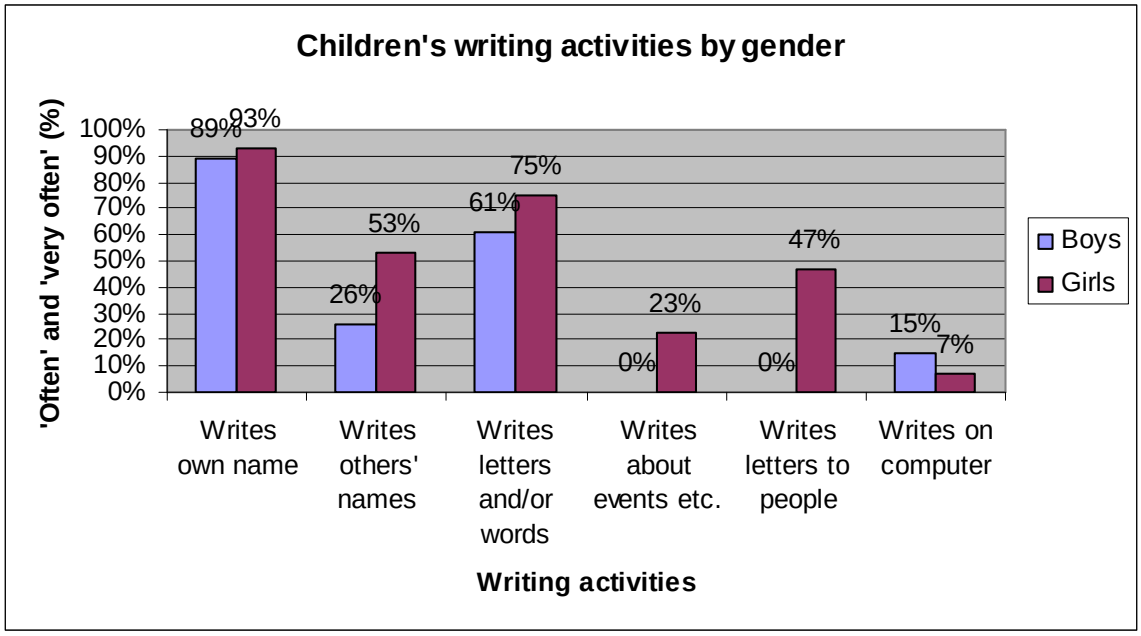
No boys at the three schools *wrote about events or possessions*; however, 16%, 20% and 33% respectively of girls at the three schools *wrote about events or possessions.*

No boys *wrote pretend letters* to someone; however, 58%, 60% and 22% respectively of the girls at the three schools *wrote pretend letters* to people.

Writing using the computer was the least popular activity overall with no boys or girls at School 1 and no girls at School 2 *writing using the computer.* Only 20% of boys at School 2 and 25% and 22% respectively of boys and girls at School 3 *wrote using the computer.*

Children's writing activities by gender

Graph 5.18 (overleaf) shows the children's writing activities by gender.



Graph 5.18 Children's writing activities by gender

When comparing children's writing activities by gender alone, girls participated in all writing activities, except *writing using the computer* more than the boys.

There were 93% of girls at the three schools who *wrote their names* compared to 89% of boys. More than twice as many girls (53%) *wrote others' names* compared to 26% of girls. 75% of girls *wrote letters and words* compared to 61% of boys. No boys wrote about *events or possessions* or *wrote pretend letters* to people, while 23% and 47% of girls respectively participated in these two activities.

More than twice as many boys (15%) *wrote using the computer* compared to 7% of girls.

Summary of Question 8

Parents indicated that children at all of the three schools participated in the listed writing activities with children *writing their own names* being the preferred writing activity at each of the three schools. *Writing using the computer* was the least preferred writing activity at each of the three schools.

Marked differences occurred in all writing activities across the three schools except children *writing their own names.*

When comparing schools and gender, girls at Schools 1 and 2 and boys at School 3 *wrote their own and others' names* and *wrote letters and/or words* more than the boys at Schools 1 and 2 and the girls at School 3.

Girls at each of the three schools wrote about *events or possessions* and *wrote pretend letters* to people compared to none of the boys at any of the schools.

No boys or girls at School 1 and no girls at School 2 *wrote using the computer* and only 20% of boys at School 2 and 25% and 22% respectively of boys and girls at School 3 *wrote using the computer.*

When comparing children's writing activities by gender alone, girls participated in all writing activities, except *writing using the computer* more than the boys.

Question 9 - Writing materials

In Question 9, parents were asked the frequency of the availability of writing materials in the home, whether children asked for writing materials and whether they asked for them as gifts. Parents were asked if they bought their children writing materials and whether they bought writing materials as gifts for others.

All parents across the three schools indicated that writing materials were available in the home. Girls asked for writing materials more often than boys. At School 1, 89% of the girls asked for writing materials compared to 59% of the boys. Also at School 1, 63% of girls asked for writing materials as gifts compared to 6% of boys.

Parents of girls were more likely to buy writing materials as gifts for their daughters than the parents of boys, however, both parents of boys and girls bought writing materials as gifts for others.

Question 10 - Beginning writing

In Question 10, parents were asked to indicate how old their children were when they asked for, or were provided with writing materials. Parents were also asked at what age their children started scribbling and/or drawing.

Parents indicated that the children asked for, or were provided with writing materials from the age of six months up until five years of age with twice as many girls as boys having writing materials from one to two years of age. All other age groups had similar results for both boys and girls.

The children started scribbling from the age of six months up until four years of age with the majority of children starting scribbling between one and two years of age. More girls than boys started scribbling between one and two years of age. All other age groups had similar results for both boys and girls.

Question 11 - Parent teaching

In Question 11, parents were asked to indicate whether or not they taught their children to read words and/or to write letters and/or words and also to indicate the frequency of their teaching. Five parents indicated they never taught their children how to read while two parents indicated they never taught their children how to write.

More parents of girls indicated they taught their children to read (61%) compared to 53% of parents of boys. More parents of girls (73%) also indicated that they taught their children to write compared to 47% of boys' parents.

Question 12 - Technology devices

In Question 12, parents were asked to indicate whether or not they owned specific types of technology devices and the number of each of these devices that they owned. The technology devices listed were:

- TV
- Video player
- DVD player
- CD/tape player
- Computer/laptop
- Digital camera
- Video camera
- PDA-personal digital assistant
- MP3 player-music player; and,
- Communication equipment-mobile and home phones

All families across the schools owned at least one of all devices except PDA and MP3 players. Some families did not own these two devices. Many families owned more than one of many other technology devices.

Question 13 - Technology experiences

The purpose of this section of the questionnaire was to establish which activities the kindergarten children participated in, on the computer, and also whether or not they played with other technology devices. The following activities were included in the survey:

- Computer programs
- Internet
- Email
- Talking Books
- Multimedia CD-ROM
- Portable game machines
- TV game machines.

Table 5.9 and Graph 5.19 (overleaf) from the *Australian Bureau of Statistics: Census 2001* outline computer use for boys, girls and children aged between 0 and 9 years of age in NSW, the Sydney metropolitan region and the three schools in this survey. This table has been used to compare computer use at the three schools with NSW and Sydney benchmarks, and also to compare the school information from the Australian Bureau of Statistics with the data from this study. *Census 2001* results were used as computer use was not included in the 2006 census.

Australian Bureau of Statistics: Census 2001

Computer use 0-9 years

Please see print copy for Table 5.9

Table 5.9 Australian Bureau of Statistics: Census 2001. Computer use 0-9 years. (Australian Bureau of Statistics 2001)

Please see print copy for Graph 5.19

Graph 5.19 Australian Bureau of Statistics: Census 2001. Computer use 0-9 years. (Australian Bureau of Statistics 2001)

Analysis of the data from the *Australian Bureau of Statistics: Census 2001* indicated that computer use at home by the girls (55%) and boys (47%) in School 1 was greater than computer use for any other group of boys and girls in NSW, Sydney, Schools 2 or 3.

Total use of computers at home by boys and girls (51%) at School 1 was greater than computer use at home for NSW (32%), Sydney (32%) and the other two schools (34% and 26% respectively).

Figures for School 2 were fairly comparable with figures for NSW and Sydney. At School 3 computer use: was less than Schools 1 and 2, NSW and Sydney; and, was the same for both boys and girls.

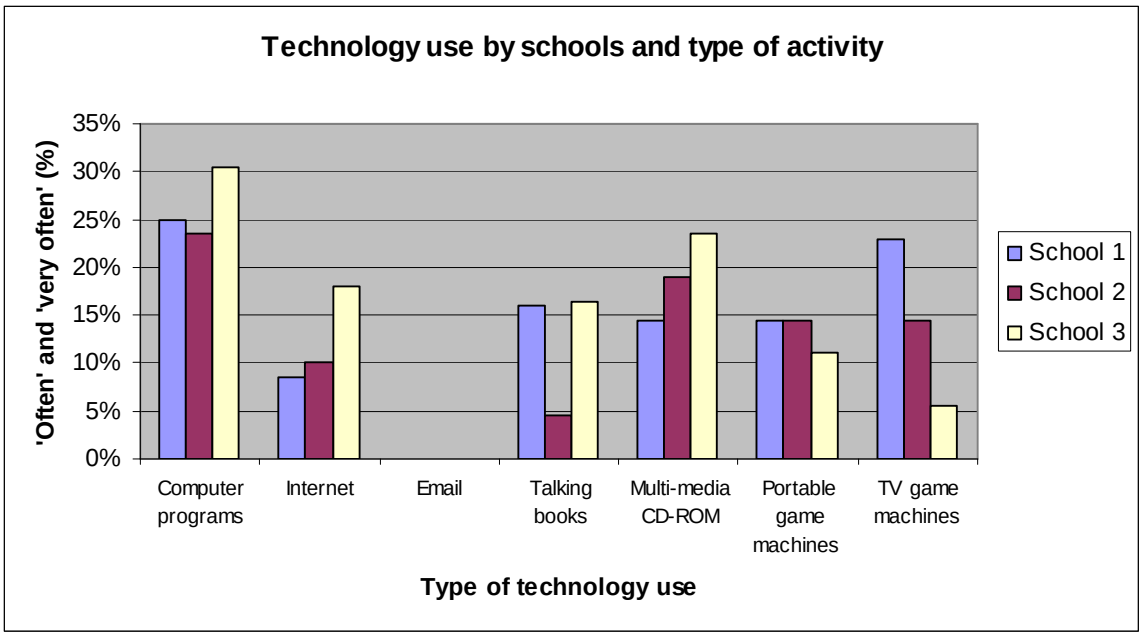
In this study, the following tables and graphs indicate the percentage of kindergarten children who, in a typical week, used the following technology in their homes.

Technology use by schools

Table 5.10 (below) and Graph 5.20 (overleaf) indicate technology use by the children at the three schools.

	School 1	*School 2*	*School 3*	*Mean*
Computer programs	25%	24%	31%	27%
Internet	9%	10%	18%	12%
Email	0%	0%	0%	0%
Talking books	16%	5%	17%	13%
Multi-media CD-ROM	15%	19%	24%	19%
Portable game machines	15%	15%	11%	14%
TV game machines	23%	15%	6%	15%

Table 5.10 Technology use by schools



Graph 5.20 Technology use by schools

Parents indicated that children at School 3 used *computer programs*, *the internet, talking books* and *multi-media CD-ROM* more than the children at the other two schools.

The children from Schools 1 and 2 used *portable game machines* as often as each other, however, the children from School 1 used *TV game machines* more often than children from the other two schools. Questionnaire results indicated that no children, at any of the schools, used *email*.

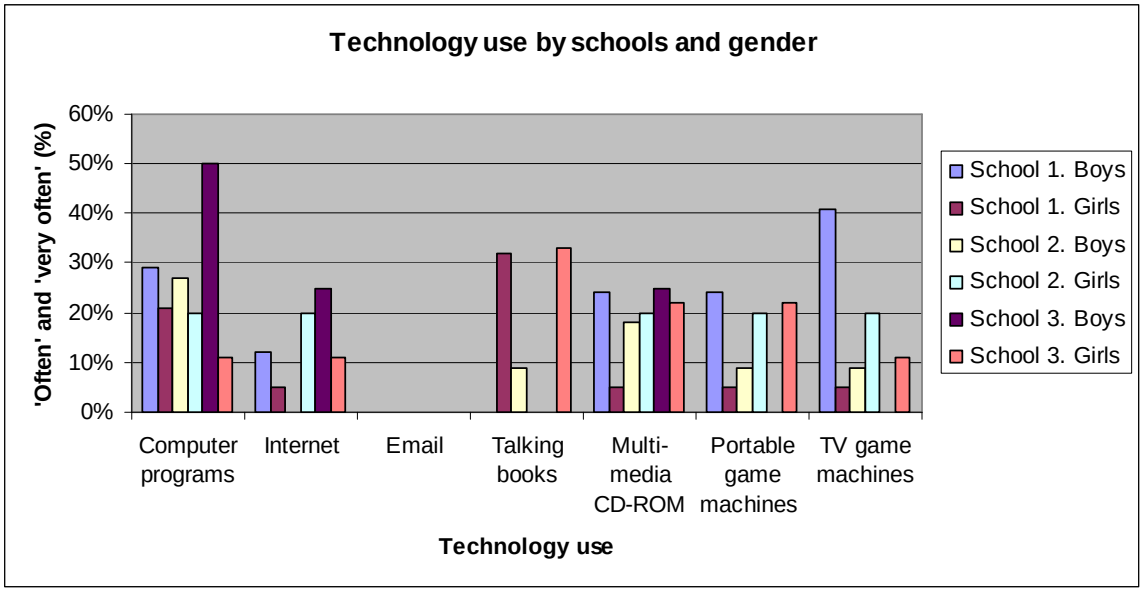
The children from School 2 used *talking books* less often than the children from the other two schools.

Technology use by schools and gender

Table 5.11 and Graph 5.21 (overleaf) indicate technology use by schools and gender.

	School 1 Boys	*School 1 Girls*	*School 2 Boys*	*School 2 Girls*	*School 3 Boys*	*School 3 Girls*
Computer programs	29%	21%	27%	20%	50%	11%
Internet	12%	5%	0%	20%	25%	11%
Email	0%	0%	0%	0%	0%	0%
Talking books	0%	32%	9%	0%	0%	33%
Multi-media CD-ROM	24%	5%	18%	20%	25%	22%
Portable game machines	24%	5%	9%	20%	0%	22%
TV game machines	41%	5%	9%	20%	0%	11%

Table 5.11 Technology use by schools and gender



Graph 5.21 Technology use by schools and gender

Parents indicated that the boys at School 3 had the highest use of *computer programs* (50%), compared to other groups ranging from 11% - 29%. The boys at School 3 also had the highest use of the *internet* (25%), compared to other groups ranging from 0% - 20% and the highest use of *multi-media CD-ROM* (25%), compared to other groups ranging from 5% - 22%.

Parents indicated that neither boys nor girls used *email.*

The girls at Schools 1 and 3 had the highest use of *talking books* (32% and 33% respectively) compared to the boys from School 2 (9%) and all other groups indicating 0%.

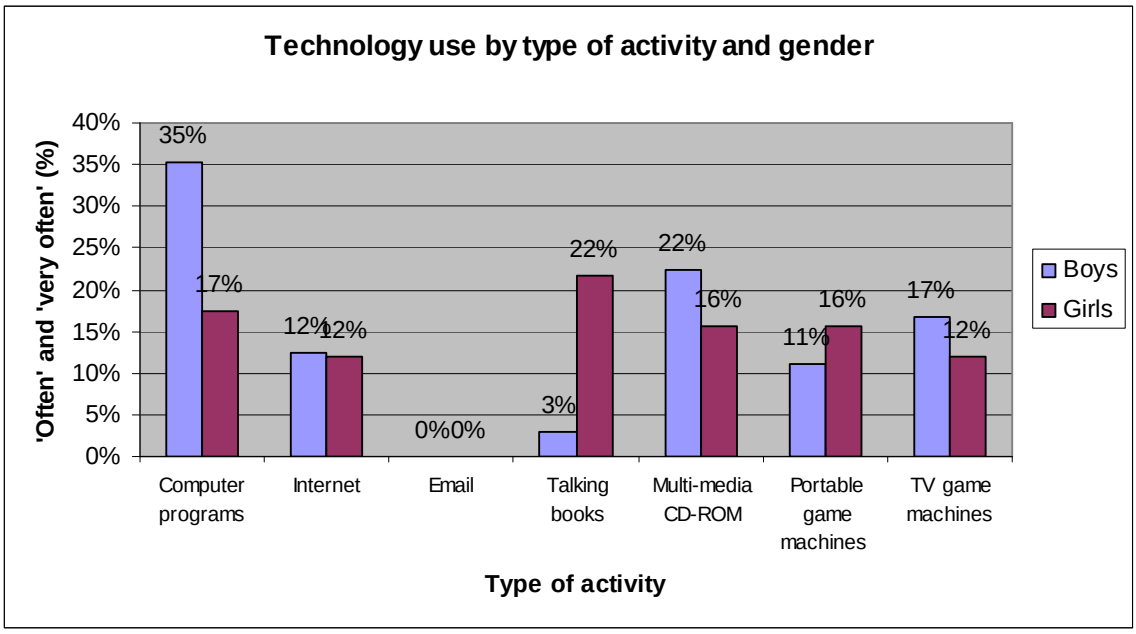
The boys at School 1 had the highest use of: *portable game machines* (24%) compared to other groups ranging from 0% - 22%; and, *TV game machines* (41%) compared to other groups ranging from 0% - 20%.

When comparing technology use with boys and girls, several groups indicated that they never used the following technology:

- *Internet:* Boys at School 2;
- *Talking books:* Boys at School 1 and 3 and the girls at School 2;
- *Portable game machines:* Boys at School 3; and,
- *TV game machines:* Boys at School 3.

Technology use by type of activity and gender

Graph 5.22 (below) indicates technology use by gender only.



Graph 5.22 Technology use by type of activity and gender

When comparing technology use by gender only, parents indicated that the boys at the three schools used *computer programs* twice as often (35%) as the girls (17%). Internet use by boys and girls was the same (12%).

As recorded in all other tables and graphs, parents indicated that neither boys nor girls used *email.* The girls used *talking books* seven times as often (22%) as the boys (3%).
The boys used *multi-media CD-ROM (22%)* and *TV game machines (17%)* more often than the girls (16% and 12% respectively); however, the girls used *portable game machines(16%)* more often than the boys (11%).

Summary of Question 13

When asked what types of technology were used by their children, parents indicated that their children used *computer programs* more often than other types of technology. No parents indicated that their child used email. *Internet* use only accounted for 12% of the total responses while other technologies – *talking books, multi-media CD-ROMs, portable and TV game machines* had fairly comparable results, being between 13% and 19% of total responses.

With technology use at the three schools, apart from *email*, parents indicated that their children used all other technology devices; with the children at School 3 using four of the technology devices more than the children from Schools 1 and 2. The children from Schools 1 and 2 used *portable game machines* and *TV game machines* more often than the children from School 3.

When comparing schools and gender, the boys at School 3 had the highest use of *computer programs,* the *internet* and *multi-media CD-ROM*. The girls at Schools 1 and 3 had the highest use of *talking books,* and the boys at School 1 had the highest use of *portable game machines* and *TV game machines*. Several groups indicated that they never used some of the technology devices.

When comparing technology use by gender only, the boys used *computer programs, multi-media CD-ROM* and *TV game machines* more often than the girls. *Internet* use by boys and girls was the same and no boys or girls used email. The girls used *talking books* and *portable game machines* more often than the boys.

Question 14 – Parent views on the value of technology in learning to read and write

There was an open-ended question at the end of the survey: *'What are your views on the value of technology in learning to read and write?'* The parents' comments have been grouped in schools and according to the gender of their children. Comments have also been grouped as: being supportive of the value of technology in learning to read and write; or, being non-supportive or uncertain.

Parent Views on the Value of Technology in Learning to Read and Write at School 1

School 1 – Parents of boys	*School 1 – Parents of girls*
Supportive 1. Technology is present in some way in most of the day in people's lives today. Its value for learning anything is huge. 2. Both of our children have been exposed to parent supervised computer games since young and have learnt through the songs, rhymes and games. 3. I fully support all avenues of technology to enhance my son's potential and to have various forms of this available to him is priceless to his learning. 4. My child has used CD-ROMs to learn the alphabet and phonics. He has also played children's computer games from time to time. I think that these technologies have enhanced his learning. 5. We have a computer for the family business and we feel the children now may require their own computer. 6. I think there is a place for technology in learning to read and write but definitely reading books to my children every day has helped them to enjoy reading. 7. Very important	**Supportive** 1. Plays a valuable part particularly with vocabulary and comprehension. 2. Another medium to gain access to words and writing, however, as in TV, time limits are placed. 3. Can be a good benefit if it is a learning program not just a game. 4. Essential. 5. It should never replace parental assistance. Some tools can help contribute eg. Leap Frog, Leapster, selective computer games. 6. Technology seems to make it a little more fun. The children get a kick out of just using the technology – not realising they are learning along the way.

School 1 – Parents of boys	*School 1 – Parents of girls*
8. Technology in learning to read and write is very valuable. As the children in kindergarten today will face new technology every day and it is important that they are able to recognise and use the equipment. 9. TV and DVDs and computer games are great but I make sure they are limited in time and to certain times of the day. 10. Computers have great educational games that make learning fun. 11. I've found that time spent using educational CD-ROMs is beneficial. Also as preschoolers, children do retain basic number and letter recognition from Early Childhood programs such as Sesame St etc. I believe technology is of vital importance in a child's education particularly in learning to read and write. 12. We strongly believe that technology plays a major part of our lives today and that kids that learn early will be comfortable with technology at school/work. 13. I think that many kids' computer games/programs would be of benefit in learning to read. 14. CD-ROMs are very good – also good to learn in other language.	
Non-supportive 1. It puts too much pressure on little ones to grow up too fast. 2. I believe that children need to learn to write properly before relying on the computer.	**Non-supportive** 1. We believe there is a place for them to assist in learning, however would prefer she learn the 'old fashioned way'. 2. Not used in quiet time to wind down. Books are used for this time. 3. My children probably still value books the most and the best interactive form of teaching. Techno devices start off with good intentions but often disintegrate into an easy

School 1 – Parents of boys	*School 1 – Parents of girls*
	way for us parents to entertain the children so we tend to leave the children alone playing games rather than sitting with them and teaching. 4. Because we don't have any exposure to computers, I'm not aware of their full potential in learning to read and write and the programs available. 5. Technology could help with reading although you can learn to read just as well without it. Learning to write doesn't require any technology just pencil and paper. I think children from age 4-6 years old, the basic hand writing and one to one reading with books is more essential. 6. I think one on one is more beneficial. I am sure there are some educational CD-ROMs but they seem expensive and our computer is a bit slow for them. 7. Could be a useful tool if used correctly but not a necessary tool. One on one much better. 8. I haven't been in a big hurry to get them into computers. I prefer to see them playing together outside etc. I know it will have to happen (I have a 13 yo boy) but not yet. School use is fine. My friends [sic] little kids all know their way around a computer and I don't see it as a big advantage at age 5. 9. Probably something I could embrace more. I'm not really a computer person so it doesn't tend to be something I think to do with my daughter.

Table 5.12 Parent views on the value of technology in learning to read and write at School 1

Parent Views on the Value of Technology

in Learning to Read and Write at School 2

School 2 – Parents of boys	*School 2 – Parents of girls*
Supportive 1. Very valuable 2. I feel it is important for children to learn about technology as it is their future as they will need to know these skills in the workplace. 3. Computer games for learning are a wonderful thing provided they are appropriate eg. Reader Rabbit. Children have fun while learning. 4. With evolution children of today need extra stimulation and fun. Computers are easy and fun for them. 5. I think they are very important in reading as the kids want to read so they can get better at the games. 6. There seems to be an implicit connection in my child with the computer and fun, it would then be helpful if parents could be guided in the choice of CD-ROMs that enhance learning to read and write best via the school.	**Supportive** 1. The access to learning and teaching internet sites has been invaluable for me while teaching my child to read. 2. I think read along books/CDs/cassette sets are great as the child can follow the story and learn to recognise words/letters. I think computers can be useful so far as [sic] reading/listening to instructions but can be detrimental as the child may not get enough practise writing.
Non-supportive 1. Not until child has understanding of reading words. 2. Very important but technology does not replace the importance of sitting down with a pen and paper and spending one on one time helping my child learn. 3. Valuable tool although many children spend too much time (unsupervised) sitting in front of screens in lieu of physical/outdoor	**Non-supportive** 1. Can be quite valuable as generally it is a one to one situation, however, this kind of learning should be in small doses and not be instead of a teacher or parent reading real books or physically writing. 2. While we have used CD-ROM pre-reading activities, we prefer to focus on reading books, magazines, street and road signs etc.

School 2 – Parents of boys	*School 2 – Parents of girls*
activities. 4. Although I believe technology has a valuable place I am concerned that we use it too often and that it may take emphasis off reading and learning basic skills. I also think it can create social problems if a child is always using the above technology.	

Table 5.13 Parent views on the value of technology in learning to read and write at School 2

Parent Views on the Value of Technology in Learning to Read and Write at School 3

School 3 – Parents of boys	*School 3 – Parents of girls*
Supportive	**Supportive**
No comments	1. It is fine as long as they are made in Australia as different countries speak differently. 2. It's an improvement because the future is based in that computerised system. 3. I believe that as we use technology more and more in our everyday lives, it is essential that children under supervision learn and use it for its value in learning to read and write. I'm not sure, possibly more reading than writing. 4. Technology is an important and evolving part of learning to read and write. Its importance has increased greatly as time passes. The value is therefore high and significant. 5. Computers and computer games including learning tools are great but it should be balanced with reading from books.
Non-supportive	**Non-supportive**
1. It could be helpful, however so many kids end up hooked on computer games or simply responding to programmed prompts that we prefer our son to initiate and interact creatively with simple tools which he can understand (pencils, paint, paper, scissors) so he realises that he is the centre of creativity – not a machine. 2. I think it can be very useful – it attracts the child's attention. But has to be backed up with 'old fashioned' books as well – technology is not everything.	1. There are a lot of devises for children to help develop reading and writing. I do think it is important not to lose that personal interaction with children while learning.

Table 5.14 Parent views on the value of technology in learning to read and write at School 3

In total, there were twenty supportive comments from boys' parents about the value of technology in learning to read and write, compared to thirteen supportive comments from the girls' parents, however, the greatest difference existed at School 1 where there were fourteen supportive comments from the boys' parents compared to only six supportive comments from the girls' parents. The number of surveys returned for boys and girls at School 1 was similar; 17 and 19 respectively.

In relation to the non-supportive comments, there were eight comments from boys' parents compared to twelve comments from girls' parents, and at School 1 there were two comments from the boys' parents compared to nine from the girls' parents.

Differences between the number of supportive and non-supportive comments from parents of boys and girls at Schools 2 and 3 were minimal, except at School 3 where the boys' parents made no supportive comments compared to five supportive comments by the girls' parents. Sample sizes of returned questionnaires at School 3, though, were four for boys and nine for girls.

From the boys' parents at School 2, there were both more supportive and more non-supportive comments than for the girls. This can be explained, though, by he number of returned surveys (boys=11; girls=5).

Interpretive Summary

An analysis of the findings from the written questionnaire has established trends at three Sydney metropolitan schools of multiliterate practices of kindergarten children in their homes. This analysis has specifically established trends in relation to the socioeconomic background of the schools and the gender of the children.

When responding to the questions in the written questionnaire, parents were also asked to make comment. Some of these comments have been included in this summary to further provide an understanding of the multiliterate practices at home of the kindergarten children from the three schools.

In the analysis of storybook readings, except for two families, all children were read to on a regular basis by parents and/or family members.

There were minimal differences in the number of storybooks read to boys and girls. As this comment shows, parents valued reading to their children and the children enjoyed being read to.

> My child knows her favourite books word for word. We usually have a favourite and a new book for each child. There are two children and both listen and read together each night, however, if the children are tired and we have had a busy day, we may often all snuggle up on the couch and read in the afternoon for 'quiet time'.
>
> (Parent questionnaire, Parent of girl, School 1, March 2005)

Parents also indicated the variety of activities in which they included in their storybook readings. Differences emerged in reading activities among schools and depending on the children's gender.

Children also initiated reading activities in their homes. When examining the findings, it can be seen that from the children's perspective, the activities parents involve their children in are enjoyable and engaging, since a similar per cent of children, it is reported, asked to be read to, and moreover, asked for their favourite book. We know from the literature cited in Chapter Three that such reading behaviours are important indicators of children's future reading development. The comments below indicate that parents are proud of their children's achievements.

From the Parent Questionnaire, March 2005, parents' comments included:

> My son often memorises his favourite stories.
>
> (Parent of boy, School 1)

> My child knows her favourite book word for word.
>
> (Parent of girl, School 1)

> She reads a lot of books and asks mummy and dad to read them for her.
>
> (Parent of girl, School 3)

Fewer than half the parents took their children the local library but these parents valued this service. Comments in the Parent Questionnaire, March 2005 included:

> The library has a display of children's books that are all excellent choices. My child picks books from this range that rarely requires me to change them. I always check the books he has picked.
>
> (Parent of boy, School 1)

> Once a week we go to the big library and she mostly chooses her books and videos and I try to give her appropriate books for her age.
>
> (Parent of girl, School 3)

Gender differences emerged across all reading and writing activities. Parents were involved in all reading activities, except *reading on the computer,* from a younger age. Girls also participated in all writing activities, except *writing on the computer.* Girls also asked for writing materials from a younger age than boys.

Parents indicated on the questionnaire that all technology devices were available in their homes except for PDA and MP3 players being unavailable in a few of the homes. Technology use of all devices, though, by the children across the three schools was minimal with the highest use being only 27%.

The results of children's technology use are rather predictable. The children were not considered to be readers by their parents, let alone writers so the use of the internet and email, could be expected to be infrequent. What is surprising is the rather low percentage of children using other types of technology. One possible explanation is that some parents felt that other types of technology, such as TV game machines, and portable games like Gameboy, are not educationally sound and therefore they did not like to admit that their children had such 'toys'. Also, possibly parents did not view these as legitimate forms of engaging with reading and writing. Yet these children could be engaging as readers and writers, despite their parents perceptions. It would have been interesting to ask the parents to list the computer programs that their children did use, as it is possible that these were 'educationally relevant' games.

With comparisons based on gender, boys used all technology devices more than girls except for *talking books* and *portable game machines.*

The parents from the three schools had a wide range of responses in their comments in the Parent Questionnaire, March 2005 on their children's technology experiences.

> We have PlayStation 2 that only gets played on weekends. The computer can be used at any time because it has educational software.
>
> (Parent of boy, School 1)

> At the moment I don't believe in buying portable game machines/TV games and will resist as long as I can.
>
> (Parent of girl, School 1)

> Her father has a PlayStation and she sometimes plays with him and her brother. She sometimes asks when they aren't home, but she loses interest fairly quickly.
>
> (Parent of girl, School 1)

> We own two video stores so our children have access to a whole range of games and all types of machines.
>
> (Parent of boy, School 2)

However, parents across the three schools were more supportive than non-supportive in their views about the value of technology in learning to read and write. Differences though emerged across schools and according to children's gender.

It seems that most parents thought that technology was a useful tool for teaching their children to read and write. However, it was also clear from their responses to the other questions that they believed it was far more important to read books to their children. For many parents, techno-literacy skills were viewed in the same vein as *'play'* and therefore not '*academic'.*

Parents seem to view reading and, in particular learning to read as being primarily the domain of print and paper-based materials. While techno-literacy practices might be considered important and certainly present in the daily lives of their children, it seems they are viewed as '*an addition to'* paper and print-based literacy activities, rather than an activity *'instead of'* paper and print-based literacy activities. However, what is clear is that children do have many opportunities to develop techno-literacy skills, as well as print and paper-based literacy skills, in their homes.

From the survey, it is clear that parents are involved in their children's multiliteracy learning (both paper and print-based, and techno-literacies) in the years prior to

school, and also in the first year at school. While differences existed among schools, there was little consistent difference in relation to socioeconomic background at these three schools. In relation to gender, once again differences were apparent, however, parents of both boys and girls provided a range of literacy related activities at home for their young developing readers.

This chapter has established trends at three Sydney metropolitan schools of kindergarten children's multiliterate practices in their homes. These trends have been recorded to highlight information in relation to the socioeconomic background of the three schools and the children's gender.

The next chapter will look in detail at data gained from the five case study families. This data will include information from the questionnaire, anecdotal information from both parent focused interviews and child focused interviews, and systematic observations of the kindergarten children in their homes.

Chapter Six

Understanding the Children's Stories

Chapter Six

Understanding the Children's Stories

Introduction to Immersion Phase: Case study stories

> A child is not a constant, universal organism operating in a vacuum. Rather the mind is inheritantly social. The path from object to child and child to object passes through another person.
>
> (Vygotsky 1978, p30)

In this chapter accounts of the five case study children and their families are presented. Each of these children and their families' journeys are captured in a descriptive story and interpretive comments are included. The development of these stories has drawn information from:

- parent responses in the initial questionnaire;
- focused interviews with parents in the children's homes while the case study children were at school, prior to the first meeting with the case study children;
- discussions with parents at each of the home visits;
- observations of the individual children in their homes;
- discussions with the children while engaged in literacy and technology tasks;
- focused technology interviews with the children; and,
- literacy and technology assessments of the children.

Some work samples and parent comments have also been included in some of the stories.

A brief overview of the case study children and their families is outlined below in Table 6.1 (overleaf).

An Overview of the Case Study Children and their Families

Case study no.	Child's name	Gender	Family members living at home	Other family members	Age in May 2005	School attended
1.	Alice	girl	mother father	Older step sister Two older step brothers	5 years 3 months	2
2.	Adam	boy	mother father younger sister		5 years 7 months	2
3.	Alexandra	girl	mother father older brother younger brother younger twin sisters	Older half brother	5 years 3 months	3
4.	Winton	boy	mother father older sister		5 years 2 months	1
5.	Jacob	boy	mother father younger sister		6 years	1

Table 6.1 An overview of the case study children and their families

Each of the case study accounts is documented within the following framework:

- Background Information about the Child
- Environmental Factors
    - The home
    - The people
    - Early learning experiences
- The Child
    - Intrapersonal characteristics
    - Observations from home visits
    - Literacy learning

At the end of each of these accounts, a summary of each child is provided in light of the following research question that guided this inquiry:

- What are the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools?

The two focus areas for the above question; socioeconomic background and gender were addressed in the last chapter, in the interpretive summary of the questionnaire.

In comparing the three schools in this inquiry using the census information, Census (2006) figures confirm School 1 is situated in a high socioeconomic area. For School 2, the census figures confirm a socioeconomic population that is relatively comparable with Sydney and NSW, but not as high as the population at School 1. School 3 is: situated in a lower socioeconomic area than School 1; and, (although comparable with School 2, Sydney and NSW on several criteria in the census) has a far higher percentage of persons living in dwellings other than separate houses and a higher percentage of one parent families.

In the following chapter the above research question will be addressed again, in the context of the five case study children's stories. This will allow the five stories to be compared and contrasted; thus, facilitating the identification of common threads in the multiliterate practices of kindergarten children, in their homes.

The second research question that guided this inquiry relates the multiliterate practices and skills of kindergarten children in their homes to the expectations of current New South Wales (NSW) Department of Education and Training (DET) policy and curriculum, that govern the first year at school. The relevant documents have been analysed in Chapter Four and this question is also explored in the following chapter, Chapter Seven.

Case Study No. 1: Alice

Background information about Alice

Alice attended Kindergarten at School 2 as a student in one of two kindergarten classes. At the time of first contact with Alice's parents, Alice was aged 5 years and 3 months.

Eight, weekly visits were made to Alice's home for approximately an hour and a half each visit, with the first visit being made while Alice was at school. Both her mother and father were present at this first visit where Alice's background and the parents' views were discussed using the information from the initial parent questionnaire (Appendix A) and questions from the parent focused interview (Appendix F). This information provided a valuable backdrop to, and understanding of, Alice's development.

Alice was a friendly and extroverted child with good self-esteem and she seemed highly motivated to learn. It was easy to build a rapport with Alice as she was a cooperative child who appeared keen to please. Her journey in learning was supported by interested and involved parents.

On subsequent visits, Alice was observed in her home environment with print and paper-based literacies and working on the family's computer. Many topics, mainly about Alice's learning, and activities with the family and at school were also discussed with both Alice and her mother. Anecdotal notes were recorded and conversations were audio taped. Alice's father was also present at the beginning of the second visit but then he left to tutor his guitar students. He was not present again until the last visit.

Alice also completed a technology interview (Appendix G), and her phonemic awareness (Appendix I) and reading skills (Appendix H and J) were assessed.

Alice's mother had an afternoon routine for Alice when she returned home from school each day. And, on every visit Alice would appear happy to greet me and invite me in for afternoon tea. I would sit with Alice and her mother on each of these afternoons, having afternoon tea and chatting about recent events and Alice's activities at school and at home.

I felt that I quickly became an accepted member of the home environment and on my last visit, Alice's mother seemed disappointed that the visits had come to an end.

> What are we going to do now Alice on Wednesday afternoons?
> We are both going to miss you so very much.
>
> (Home visit, 27 July 2005)

On this last visit, Alice also gave me a card that she had made.

Interpretive comment about Alice

It was apparent from the first meeting with Alice's parents that both parents were interested in Alice's development and progress at school. Both parents appeared friendly and showed interest in this inquiry. They expressed that they thought it was important for people to be involved in research as this helped to improve the way we will do things in the future. Alice's father did most of the talking at this first meeting.

At our first meeting together, Alice showed excitement about meeting me and it was obvious that her parents had talked to her about my research because she asked when she could read and write for me, and work on the computer with me. Although this was our first meeting, Alice appeared confident and chatted openly with me.

On each of my visits, Alice was cooperative and enthusiastic. She never needed any encouragement to participate in any of the activities. Alice's afternoon routine was indicative of the structured way in which the household operated and Alice followed these routines in a cooperative manner. However, on some afternoon visits, Alice was excited about showing me what she had done since my previous visit and would have skipped afternoon tea if her mother had allowed her to.

My weekly visits had also become part of the household structure. Alice was always waiting for me each week and Alice's mother had afternoon tea ready for both Alice and myself.

Environmental factors

The home

Alice lived in a brick suburban house in a quiet cul-de-sac with her mother and father; her parents having moved to their present home before Alice's birth. Alice's step-sister and two step-brothers no longer lived in the family home.

The rooms in the house were all separate from each other with a large entrance from the lounge into the dining room and from the dining room into the kitchen. The dining

room was the hub of the house and was child-centred. Alice had access to books and a large number of writing, drawing and art supplies on her own table in the dining room. There was also a map of the world under the glass topped dining table and Alice could accurately point out many countries of the world on this map. She knew where her family and relatives resided, and where they had holidayed, and was able to locate these cities and countries on the map. She could also locate Africa, the country where their sponsored child lived. On 'News' day at school, Alice had taken her Maori doll to school, and she could also locate New Zealand where her Maori doll had come from. Alice checked on the map where events were happening.

There were several pieces of Alice's art and craft work and cards 'on show' in the lounge room, dining room and kitchen. Alice loved craft and making things. She showed me her book that she had made at pre-school and a little placemat she had made for her pot plant by gluing many little pieces of various materials together. Alice had her own table in the family's dining room. It had a wide variety of craft and drawing and writing materials on it.

The family computer was located on a study desk in a small room adjacent to the dining room. The computer was connected to a printer and the internet. Alice said it was *'mostly daddy's computer because he was the one who used it'.* Alice said she only knew how to use it '*a tiny bit'.*

> I know how to put the disk in and out and I know which buttons you press and mum knows how to work some bits.
>
> (Alice's comment, Home Visit, 11 May 2005)

The backyard was accessible as the house has been built on a flat block of land. Alice was able to play in the backyard alone, observed by her mother from the kitchen window. Like the interior of the home, the backyard was also child-centred with a large variety of outdoor equipment. Alice's mother reported that Alice liked to play outside in her cubby in the backyard. The family home was in a safe area to play with limited traffic in the cul-de-sac or adjoining road outside the house.

Interpretive comment about Alice's environmental factors – The home

During my visits, the home was always quiet and well organised. With no other children at home, Alice received much attention from her parents.

It was clear from observations of the main room that Alice's activities and development were important to her parents. The map under the glass topped dining room table provided a rich learning environment for Alice. She referred to countries and cities during every afternoon session when I visited and it is most probable that Alice's parents used the world map as a teaching tool during other meal times. Alice's parents took advantage of Alice's interests (eg. Maori doll) and used her interests for further learning (eg. location of New Zealand).

Alice had easy access to art and craft materials and it was evident that her parents valued the things she made because they would put them on show in the main room in the house. They did not expect Alice to keep her art and craft materials or her artistic creations in her own room or in a play area. Alice's table was a part of the main room.

Alice had access to the family computer but was not allowed to use it without parental permission. On all of my visits to the family home, Alice's mother supervised Alice's activities on the computer.

The backyard and the cul-de-sac were both safe areas in which to play and Alice often played in her cubby house in the backyard or rode her bike on the road outside the front of the house; however, Alice's mother always supervised her play.

The people

Alice's mother spent a lot of time with Alice. She was at home with Alice until Alice was two and a half years old and then returned to work for one day a week.

Alice's father's family was Maltese, although Alice's father was born in Australia. He had a musical background and played and taught the guitar. He had also completed training in early childhood education and in special education, having a Bachelor of Arts and a Diploma of Education. Alice had been exposed to music since birth. Alice's father stayed at home with Alice for the first six months of her life. As Alice's father had recently been unwell, he had also been at home with Alice for the two years prior to Alice's commencing school.

When Alice was born, her step-brother was finishing high school and still lived with the family. Alice had two older step-sisters. No other children lived in the home with Alice and her parents. Alice was cared for by her maternal grandparents one day each week until entry to school. Alice's paternal grandmother spoke Maltese to Alice's two older step-sisters with whom Alice had weekly contact. Alice was also exposed to words spoken in Maltese. Alice's aunt was a music teacher and spent time with Alice, teaching her about music and they also completed many puzzles together.

Alice has always had older children as neighbours. One child from her class at school lived in the neighbourhood. Alice preferred to play with someone rather than playing alone.

Interpretive comment about Alice's environmental factors – The people

Alice's parents were involved in Alice's development with both parents being at home during the first six months of her life. At this time her older step-brother was also living at home.

Alice's father was educated in early childhood development and from his conversation at our first meeting, he expressed a continuing interest in this area. He discussed Alice's early learning at home and Alice's exposure to music and the importance he felt this played in her development. Alice's father had also had input into Alice's education in the two years prior to her commencing school. Alice's learning was a focal area for both of her parents.

Alice did not have frequent contact in the early years with children her own age. Most contact was with her parents, grandparents and older children in the neighbourhood. Alice's step-brother and sisters did not play a major, nor a consistent role in her early development. Both maternal and paternal grandparents had frequent contact with Alice and had been carers on a weekly basis. Alice was exposed to a language other than English in her early years. Alice's aunt also exposed her to music.

Early learning experiences

Alice's mother read many books and Alice often saw her mother reading. She also encouraged Alice to read. Her father read many factual texts. Since Alice was a year

old, her mother and father read to Alice at bed time and at other times of the day, totalling on average six storybook readings each week. Alice liked to read the back of cereal packets and together with her mother, read Dr Seuss books and they read words together. Her father also animated his versions of storybook reading. No other family members read to Alice.

When reading to Alice, her parents 'very often'[1] participated in a variety of reading activities including discussing and naming the pictures, talking about the meanings of words, focusing on the words and talking about the sounds in words and the names of letters, and discussing rhyme. Alice also asked a lot of questions when her parents were reading to her.

Alice *'sometimes'* asked to be read to, and has attempted to read to others from three-four years of age. She also 'sometimes' asked for favourite books to be read. Since she was two years of age, she 'often' attempted to read to herself and memorised books read to her. Alice had favourite books including Dr Seuss, Bible Stories and several books from the library.

The family 'sometimes' visited the council library and on library visits, Alice 'often' chose her own library books and her mother also 'often' helped Alice to choose appropriate books. Alice had her own library at home of approximately 40-60 books. These books were purchased by Alice's parents and her extended family from bookstores, shops and library sales and Alice 'often' received books as gifts.

Alice 'often' read signs in the wider community and 'sometimes' read other material as well as books including comics, magazines, TV programs etc. Alice 'seldom' used a computer involving reading, and 'seldom' read instructions for games, building equipment or videos.

Alice loved writing and drawing and she 'very often' wrote her name and others' names, words, and letters of the alphabet, and pretend letters to others, but she 'seldom' used the word processor on the computer to write. She asked for writing materials at around two years of age and scribbled and drew from this time. Alice's parents indicated that they 'often' taught Alice to read and write words.

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[1] The quotation marks around words throughout this chapter indicate parental responses to questions in the initial questionnaire.

In the home, there were four CD/tape players, three home/mobile phones, two TVs and two DVD players, one video player and one computer. The family had a non-digital camera and had the prints transferred onto CDs. Alice 'sometimes' listened, especially in the car, to talking books on CD or tape. Alice's mother said Alice was more interested in these when she was younger.

Alice 'seldom' used programs on the computer or multimedia CD-ROMs, although her mother commented that Alice *liked to use the computer.* She tried to write her name on the computer and dictated the letters to her mother and her mother typed Alice's name for her. Alice played *Fun on Alphabet Farm* – a phonics program, and she used the ABC site as well as spelling games. Alice did not play any non-educational games on the computer. Alice 'never' wrote or received emails, used the internet, portable game machines or TV game machines. Alice had sole use of a CD/tape player and choreographed her own songs and dances, and performed for her parents. Alice also watched many DVDs. She had seen *Oliver, Les Miserables* and *The Sound of Music.*

In the initial parent questionnaire, Alice's mother wrote:

> While we have CD-ROM pre-reading activities, we prefer to focus on reading books and magazines and street and road signs.
>
> (Alice's mother, Parent Questionnaire, March 2005)

Alice attended pre-school two days each week from three years of age and three days each week from four years of age. The coordinator of the preschool was an early childhood educator and the preschool staff actively valued and encouraged reading.

Alice had many musical experiences. Her father used musical terms and wrote his own songs. She had attended dance lessons for six hours each week for several years and was always singing.

The family regularly went to the beach and for picnics where Alice played on the swings. Alice's mother reported that Alice was very extroverted. She often introduced herself to unknown others; both adults and children.

Interpretive comment about Alice's environmental factors – Early learning experiences

Both of Alice's parents appeared to be excellent role-models for her literacy learning. Alice saw her parents reading for pleasure and reading to find information. Alice was also encouraged to read. Alice's parents indicated in the initial questionnaire that they read to Alice on almost a daily basis (6 storybooks each week), however, when compared with the other children at the three schools in this study, Alice was read to fewer times each week than students from Schools 1 (av.11.1), 2 (av.10.6) or 3 (av. 7.5). Alice was also read to less than the average number of weekly storybook readings for girls (9.7). Alice read environmental print eg. cereal packets, as well as books and Alice's father also made reading fun by animating and inventing his own version of stories. Other family members did not play a significant role in developing Alice's love of reading.

The initial phase of this study showed that parents at the three schools, like Alice's parents participated in reading related activities with their children. These results are supported by several studies (Dale, Crain-Thoreson & Robinson 1995; Hannon 1987) that have shown parents who spend time reading to their children may also spend time teaching them to read and write. Jackson, Donaldson and Cleland (1988) reported that their studies with samples of precocious readers suggest that parent teaching and storybook reading may be highly correlated.

Alice, like the other children in this study initiated reading activities, and these results are supported by Senechal et al.'s study (1998) of kindergarten children, where parents reported that joint book reading was often initiated by the children themselves. This study also indicated that girls at the three schools were more likely to initiate all reading activities than boys, except asking for favourite books to be read. These results support Makin's study (2005) that found boys were less likely than girls to initiate reading experiences.

In this inquiry, parents who took their children to the library were more likely to encourage their children to choose their own books than help their children to choose appropriate books. However, parents helped their girls choose appropriate books almost twice as often as they assisted their boys. All but two children in the study had their own library of books at home with 48% of children owning more than 60 books, magazines or comics.

Like Alice, children in this study read signs in the community more often than other reading activities. Like other children in the study, Alice participated in all writing activities more often than she used the word processor on the computer to write. Alice's parents were like other parents in the study who were more likely to teach their girls to read and write than their boys.

Other families in this study also owned at least one, and often more technology devices except PDA and MP3 players. Alice did not have siblings to communicate with and, therefore, may have been more likely to entertain herself with audio tapes. When comparing Alice's use of technology with other children in the study, except in her musical endeavours, she used technology devices less often.

Alice was exposed to a wide variety of musical performances. Her family placed more importance on print and paper-based literacies than using technology for literacy learning. At preschool, Alice was also exposed to the value of reading and was encouraged to read.

Being the only child at home, Alice's parents took her on outings that she would enjoy and music played a major role in Alice's early learning. Alice had a warm and caring environment in which to develop.

The child

Intrapersonal characteristics

Alice presented as a happy and confident child with high self-esteem. She enjoyed learning and was compliant and cooperative. On one of my visits, Alice's mother had afternoon tea waiting and Alice was excited so her mother told her to have some patience. When asked what *'patience'* meant, Alice said '*waiting'*. When questioned, she said she had remembered the word from a book at preschool. When I commented on Alice's good memory, her mother agreed. Alice appeared proud of her attempts as she smiled.

Alice focused on every task and listened well. She transferred known knowledge to new situations. Alice asked questions and had a good memory. She appeared highly

motivated in her learning and would check if she was correct and if not, would self-correct without concern that she was not correct on the first attempt. Alice was observant of written language in her environment. For example, one afternoon she read all of the words on the 'Tiny Teddy' biscuits that she was eating.

Alice communicated well. She appeared eager to talk with me and to complete all set tasks given to her, and she seemed keen to read and write. In conversation, Alice had the ability to provide detail and she sequenced events without including unnecessary information. After my initial meeting with Alice, she always greeted me on my arrival. On each visit, she came further from the house until she was waiting at the bottom of the front drive as I drove in.

On various visits, the following events were entered in the anecdotal records:

> Alice had received an award for good work at school and couldn't wait to show it to me. She was very excited. She said she had mostly played handball at school that day with her friend Kira. She had also drawn around her hand and she was measuring her hand on the hand drawn picture on the paper to see which one was larger.
>
> Alice was very excited about her mother and father going to school the following day for 'Open Day' in Education Week. Alice also showed me her award that she had received for knowing all her first week's sight words.
>
> Alice chatted at length about Mother's Day and about what the family had done to celebrate.
>
> Alice once again greeted me with excitement, reflecting on the day's activities and reporting what she had done. Alice's reports of all events were detailed but she had the ability to only include relevant information so that she never rambled. She had a good memory.
>
> During my last visit to Alice's home, we talked a lot about school, about everything that she enjoyed, her friends and things that made her sad.

Some of Alice's likes at home included:

- listening to and dancing with music;
- watching TV;
- eating chocolate biscuits;
- painting;
- playing on the swings; and,
- swimming in the pool.

Some of her likes at school included:

- treats – different people's birthdays, ice-blocks;
- doing things on the computer;
- listening to stories;
- maths groups;
- having partners in lines and games; and,
- playing with her two best friends in Year 1.

Interpretive comment about Alice – Intrapersonal characteristics

It became apparent on my first meeting with Alice that she displayed many intrapersonal characteristics that were beneficial to learning. This initial observation was further supported by observations on subsequent visits to Alice's home. Alice was always enthusiastic about my visits; she always wanted me to stay as long as possible and she was always keen to talk to me, read and write and use the computer.

Alice focused well, listened attentively and remembered everything she was told. She displayed the ability, even at this early age, to persevere and take risks. Alice commented on most things. She always noticed if I was wearing different clothes or jewellery, if my hair had been cut or if I brought a different folder with me.

Alice's mother explained everything to Alice. Whenever Alice asked her mother a question, her mother would take whatever time was necessary to give Alice a detailed explanation that she was able to understand. Alice's ability to sequence the main events of a situation or story seemed advanced for her age. She appeared proud of her achievements at school and enjoyed showing me her work and her awards.

Alice had a good relationship with both of her parents and was enthusiastic about their being a part of her world at school. Her parents celebrated special events throughout the year and these events had also become a special part of Alice's world. Alice openly shared her delights and her concerns with me. She made it easy for me to become a part of her world.

It was interesting that all of Alice's favourite activities at home were activities that she did alone. Although her parents obviously spent much time with her, she did not include any activities that involved their participation. Alice's parents had indicated that she preferred to play with others than alone but she did not mention playing with her neighbours or invited friends from school.

When asked about favourite activities at school, Alice indicated that she liked '*having partners in lines and games'* and '*playing with my two best friends in Year 1'.* Having two best friends in the year above was an indication of Alice's maturity and possibly occurred because she had little contact, apart from at preschool and school with children her own age.

Observations from home visits

Home visit on 4 May 2005

Alice was eager to talk with me and had well developed talking and listening skills. She was cooperative and enthusiastic to complete all set tasks given to her. Alice was confident and keen to write. She held her pencil correctly and her letters, mixed upper and lower case, were well formed and of consistent size. A sample of her writing is in Figure 6.1 (overleaf).

Alice's Writing with Both Upper and Lower-case Letters

Please see print copy for Figure 6.1

Figure 6.1 Alice's writing with both upper and lower-case letters

In response to the question about what she had done at school, Alice wrote 'I PLADWITHKIRA. (I played with Kira.) as shown in Figure 6.2.

Sentence Written by Alice

Please see print copy for Figure 6.2

Figure 6.2 Sentence written by Alice

Interpretive comment

In Figure 6.1, Alice spelt out the letters in ‘mummy’ as she wrote. She checked to see if she was correct and self-corrected if needed. She also interchanged between saying the names and sounds of the letters as she wrote the other words. From observing her self-corrections, Alice displayed a knowledge of the correct spelling of the words.

In Figure 6.2, Alice knew the words ‘I’ and ‘Kira’ by sight. She did not sound these words while writing them. When questioned about her friend’s name ‘Kira’, Alice said Kira’s name was on her school bag. Alice had knowledge of the single sounds ‘p, l, d, w, i’ and could write the corresponding grapheme. She knew the name of the letter ‘a’ in ‘played’ and she knew the double sound ‘th’. From this sentence, it cannot be concluded whether or not Alice knew to start the sentence with a capital as the word ‘I’ is already a capital, however, she has ended the sentence with a full stop. There is evidence of a space between ‘I’ and ‘plad’ but not between any other words in the sentence.

Alice had a good understanding of both the names of letters, and the sounds that letters made. Research by Bond and Dykstra (1967) and Chall (1967) reported that a child’s knowledge of letter names and their ability to discriminate between phonemes, the smaller-than-a-syllable speech sounds were important predictors of later reading success.

Alice had many books at home. A large number of these books were appropriate reading books for Alice’s age and ability. She was keen to show me how well she could read. (At this stage of the year, Alice had not as yet brought home any ‘home readers’.) When reading, Alice focused on the words on the page pointing to the words as she read them. She also self-corrected when she realised the sentence did not make sense and that she had made a mistake. She said *‘home’* for *‘house’* and self-corrected. She said *‘dancer’* for *‘ballerina’* and self-corrected. The books that Alice read had labelled pictures at the back of the book. She correctly read all of the labels. Alice was already demonstrating her use of the four cueing systems; semantic, grammatical, graphological and phonological to gain meaning from the texts she read.

Home visit on 11 May 2005

Alice and I went into the computer room. The computer was turned on. Alice took out the CD 'Eureka Multimedia Ages 3 -6: My First ABCs and Spelling'. She did not know how to turn up the sound.

Alice used the mouse with confidence, always maintaining control. She watched the screen, sucking her thumb and listening intently to all instructions. All instructions on the CD were through audio. Alice played 'I Spy', a game where she had to move the cursor over various creature icons to find the creature to match the sound. The creatures made noises. If correct, there was immediate feedback with the correct name labelling the picture. Alice would move the cursor over all the animals and listen to the sounds they made. If incorrect, the response was 'try again'.

Sometimes Alice had the correct answer on her first, second or third attempt. If she did not, Alice would move her cursor over all the icons listening to the sounds they made before making another attempt. Alice's mother said that Alice had not played that game over the past couple of months. In the half hour that Alice played the game, her competence improved. She found the correct answer in far less tries. Alice knew how to exit the game. She also removed the CD. Alice only had three CDs. The other two were 'Fun an Alphabet Farm' and 'Shapes, Patterns and Music'.

Alice's mother then logged onto an internet for Alice. 'ABC Kids' was in the favourites. Alice clicked on 'ABC Kids' to open the link. As I had to leave, I told Alice that we would work on the computer again on my next visit. She happily went on working on the computer as I said goodbye.

<u>Interpretive comment</u>

Alice had automatic use of the mouse. All of her attention was focused on the screen. Alice enjoyed the game 'I Spy' and the game was appropriate for her age and ability and reinforced the initial and final sounds in words.

While using this software, Alice indicated her problem-solving ability. She did not ask her mother or myself for help but persevered and tried to work it out herself. Alice learnt quickly; she persevered and did not become upset or disappointed if she was incorrect on her initial attempts. Alice's mother supervised Alice's use of the computer and only appropriate sites were included in the 'favourites' on the desktop.

Home visit on 18 May 2005

Alice had started bringing home '*home readers'* from school to read at home each night. Alice's mother reported that Alice was enjoying reading her '*home readers'* and Alice agreed. Alice said she always chose the same *'company ones'.* Upon questioning, Alice said she could tell if the books were from the same company as the same '*company ones'* had the same colours and shapes on them. Alice read her *'home readers'* to me. She focused intently on the words in the sentences, pointing to each word in turn and correctly reading the words. At times she was reading on beyond her pointing.

Alice and I had a session on the computer. Her mother turned on the computer and found a suitable program for Alice. The program had been bookmarked in the favourite sites for easy access. It was the '*ABC Dinosaur'* site for preschool children. Alice was confident using the computer and had good control of the mouse. She clicked on '*Dino Sandwich'* which was an animal icon. She then clicked on the green button and proceeded to click and drag many food icons to build a dinosaur sized sandwich. Alice navigated around the page with confidence, double clicking, clicking and dragging and always maintaining control of the mouse. She enjoyed the game and the game gave instant positive reinforcement with *'You did it! You helped us make a dino-sized sandwich'.* The words were written on the screen but the words were also spoken.

The next game was about building kites. Alice said she had only played this game a long time ago. Many of the words were difficult to read. They were not possible to sound out and were beyond Alice's repertoire of known *'sight words'.* Alice used several strategies. She clicked anywhere to begin; her mother controlled moving up and down on the screen with the cursor on the bar at the side of the screen. Alice then read '*Loading'.* She clicked on the picture icons to build a kite and then moved the screen up and down by herself by moving the cursor on the bar at the side of the screen. She once again clicked on the picture icons to create another kite. Words written in capitals appeared on the screen. *'YOU DID IT! YOU HELPED TINA AND OSCAR BUILD THEIR KITES'.*

Alice then clicked on '*Play other games'.* Alice was able to read unknown words in the context of the game in both capital and lower case format. She knew *'a'* on the

screen was the same as the letter *'a'*. She read '*Catch that falling crab';* self-correcting the word falling from a *'short a'* to a '*long a'.* Once again Alice clicked anywhere to begin.

Alice played several other games that afternoon. She moved the bar on the right hand side to move the screen up and down, never using the direction arrows. She had good control of the mouse and was able to navigate around the screen, moving the cursor over the icons to display instructions and reading enough of the words to work out what to do. On the screen, printed in capitals she read *'UNTANGLE THAT OCTOPUS'.*

Alice then clicked on a *'paint'* program to colour her picture. She was accurate in her control of the mouse to paint various areas of her picture in the chosen colours. Alice's mother reported that Alice had not been on the computer since I had visited, the previous week.

<u>Interpretive comment</u>

Alice displayed a high level of observation. When we looked at her books she had at home, she could recognise all of the books published by the same company. Alice focused on the words and understood one-to-one correspondence. This level of reader was easy for Alice and she, therefore, did not need to rely on finger pointing to assist her in following the words.

On the computer, Alice's parents had researched appropriate sites for her and included these sites in the '*favourites'* for easy access. Alice found these sites to be fun. These sites were easy for Alice as the content was at a preschool level, however, even though none of the content was new learning for Alice, by using these sites, she was becoming more competent at using the mouse and navigating around the computer screen. Alice would always *'have a go'.* She did not give up easily on any task and always tried to solve problems by herself. Alice's mother was supportive; always helping Alice but also allowing her to find information for herself.

Alice used the same skills when reading on the computer screen as she used when reading print and paper-based texts. She once again demonstrated her use of the four cueing systems; semantic, grammatical, graphological and phonological. Alice only had to be shown a new function on the computer once. She mastered the new function and then remembered the process. Although Alice demonstrated that she

enjoyed using the computer, and she was capable in the use of the computer, her mother reported that she did not use it regularly.

Home visit on 1 June 2005

At this visit, I completed some assessments with Alice. On the Johnson Word List (Appendix H), an assessment of known 'sight words', Alice read 21 of the first 25 words by sight. She sounded out one of the words and self-corrected on another word, therefore, correctly reading 23 of the 25 words.

Alice also completed the Sutherland Phonological Awareness Test - SPAT (Appendix I). Alice total score was 49 out of 58.

She had mastered:

A: Syllabic and sub-syllabic level

- Syllable counting
- Rhyme detection
- Rhyme production
- Identification of onset

B: Phonemic level (CVC)

- Identification of final phoneme
- Segmentation 1
- Blending
- Deletion of initial phoneme

C: Phonemic level (Blends)

- Segmentation 2
- Deletion of first phoneme

D: Grapheme-Phoneme Correspondence

- Non-word reading
- Non-word spelling

Alice was unable to delete the second phoneme in the four sample words in

C: Phonemic Level (Blends).

After these assessments, we went on the computer. Alice put in the CD and pushed the button to control the CD. Alice's mother opened the game. The game was *'Fun on Alphabet Farm'* (created by Eureka Multimedia, Australian Educational Software

for home and school). Alice was using the mouse to control the cursor, listening to the instructions and focusing on the screen. Alice was clicking on chickens with alphabet letters on them to drag the chickens into the nest. The audio said the *'name'* not the *'sound'* of the letters.

Alice completed this game and played another. She hadn't played the second CD for several months. She wanted to complete the game and didn't give up. She found the *'X'* at the end and clicked '*OK'* to print her certificate. She then clicked *'cancel'*. Alice double clicked on her folder on the desktop. She then clicked on '*Alice's letter'*. She had opened a letter she had written to her friend. It said:

> Kira
> This is a note for you
> If you want to you can come over to my home.
> Please phone me on ……. (number was supplied)
> Love from Alice

Alice knew how to select letters, use the spacebar and delete. She recognised the capitals that matched the letter sounds. I showed Alice how to use the *'Enter'* key to move down to the next line. She typed:

> Dear magarit
> I like it.
> From Alice

Alice pressed the '*Enter'* key but went too far. She knew to press *'Delete'* to move back up the page. Alice's mother pressed '*Print'.*

<u>Interpretive comment</u>

Alice's score on the Johnson Word List was high (21/25 by sight; 23/25 including 2 words sounded) for a child of Alice's age.

The SPAT is widely used in many DET schools in NSW to assess the phonemic awareness skills of kindergarten children. Alice's score was high (49/58). Her results indicated she had mastered all tasks except the deletion of the second phoneme in Phonemic Level (Blends) eg., deleting the *'l'* in *'black'* to make the word '*back'.*

A large proportion of Alice's use of the computer involved games that reinforced the alphabet; both the letter names and the sounds the letters made. The games reinforced the alphabet in a fun and interesting way that seemed to help Alice's reading skills while also improving her use of computer functions and the speed at which she used these functions.

Alice's use of the computer was much less than her use of print and paper-based literacies; however, despite her infrequent use of the computer, she remembered its various functions. Alice knew the capital letters as well as the lower case letters, which assisted her in being able to find the letters she needed to write.

During this session on the computer, I recorded several of the words on the screen that Alice was using with confidence. I was intrigued as to whether or not she could read these words in isolation away from the computer screen. Could she read these words in isolation or was she using the environmental context of the words to help her to read them? Were the positions of the words on the screen assisting Alice in knowing what the words said?

Alice was not allowed to use the computer without parental supervision. Perhaps this was one reason why Alice used the computer far less than she used print and paper-based literacies. Alice did not use email. She typed letters on the computer but then printed them and sent them as she would a hand written letter.

Home visit on 15 June 2005

I asked Alice the questions on the focused technology interview. (Appendix G) She said she only 'sometimes' used the computer at home and that her mother helped her to start the computer and to open files or log onto the internet sites and then after that she mostly used the computer on her own. Alice's father also sometimes helped her to '*get ready'* to use the computer.

When asked what she did on the computer at home, Alice reported:

- I turn on the computer.
- I put the CD in.
- I play 'Squiggly Mouse'.
- 'Saddle Club' game is my favourite.

Alice also said she had printed a few letters to send to people but, otherwise she did not play with any other technology at home apart from her CD player for dancing.

At school, Alice used the computers on some days – once a week with the special computer teacher. The special computer teacher was a teacher who taught the children in the computer room once a week on a rostered basis with other classes. Alice also reported that the special computer teacher helped the children if they got stuck.

At school, Alice reported:

- We get on the computer by ourselves.
- The teacher tells us what to do.
- We do word processing and drawing.
- We are taught the names of things – screen, mouse, keyboard, click, double click and drag.
- We don't print, go on the internet or play games.

On the computer at home, Alice was able to navigate around the screen with confidence reading her father's name on his folder and opening her own folder. Alice clicked on Microsoft Word to open a writing program.

Alice was conversant with the following drop down menus and their functions:

- File; and
- Insert.

From the *'Insert'* menu, Alice clicked on '*Picture'*, then '*From File'* to insert a picture. She chose pictures with ease from a photo gallery. She could type a simple message using the letter keys, the space bar and '*Delete'.* Alice used the bar on the right of the screen to '*scroll down'* the page. Alice double clicked on the picture to change its size. She continued during the afternoon to write simple messages and illustrate her messages by inserting pictures from the files.

<u>Interpretive comment</u>

For the kindergarten children at Alice's school, using the computers seems to be an isolated lesson at this stage of the year and was not integrated into the daily class teaching. The computer lessons at school seemed to focus on teaching the basic

functions, how to use the computer and how to use the mouse with confidence. The children were also introduced to the correct terminology. Alice demonstrated an interest in learning new information; she always listened well and focused on the set task.

At the previous home visit, I had recorded several of the words from the computer screen into a list on a page. I wanted to assess whether or not Alice could read these words when removed from the context of the computer screen. Every word was read quickly and correctly, except the two words indicated below that Alice sounded out. The context of the computer screen and the position of the words on the screen were not assisting Alice to read the words. Alice could read all but two of the words '*by sight'.*

The results are listed in Table 6.2 (overleaf).

Alice's Reading of Words, in Isolation From the Computer

Words from computer screen presented in isolation	*Recognised word by sight*	*Used knowledge of sounds of letters to read words*
Cancel	✓	
Print	✓	
Insert	✓	
Picture	✓	
File	✓	
Open	✓	
Edit		Sounded almost correctly
Tools	✓	
View		Sounded 'v ee ow'
Table	✓	
Help	✓	
Window	✓	
OK	✓ Read very quickly	
Options	✓	
Start	✓	
Click here to begin	✓	

Table 6.2 Alice's reading of words, in isolation from the computer

Home visit on 20 July 2005

Alice had brought home her '*home reader'* from school and she was keen to read to me. It was from the PM Benchmark Kit (Appendix J) - Level 4 and she read the book without any errors or self-corrections. She was excited at her own success and read the book a few more times.

Alice also read '*Sam and Little Bear'* from the PM Benchmark Kit – Level 5. She made 1 error and had 1 self-correction. Alice retold the story and answered three of the four questions correctly which demonstrated her understanding of the text.

Interpretive comment

The '*home reader'* appeared easy for Alice to read. '*Home readers'* should be easy for children to read at home so that they gain confidence as learners and as readers and, therefore, usually texts are chosen where children have more than 95% accuracy. Alice had more than 95% accuracy also at Level 5.

Home visit on 27 July 2005

This was the last visit that I made to Alice's home. I assessed Alice's reading on more books from the PM Benchmark Kit using '*running records'* (Clay, 1979). I assessed her reading ability at Level 6, 9, 12 and 15. Even at Level 15, Alice made only 1 error and had 4 self-corrections. She could retell the text with understanding and had acceptable answers to the four questions.

Alice's father took a photo of Alice and myself, and Alice gave me a paper card she had made. It read:

> To MARGARET I LOVE you FROm Alice
> I love you AND you love me

(See Figure 6.3 overleaf)

Alice's Picture of a Garden with Love Hearts, Flowers, Grass and a Tree and a Picture of Herself and me, Standing Side by Side

Please see print copy for Figure 6.3

Figure 6.3 Alice's picture of a garden with love hearts, flowers, grass and a tree and a picture of herself and me, standing side by side

Interpretive Comment

I had developed a special bond with Alice and her mother during the multiple home visits. I had over those visits become what Mertens (1998) describes as an *emic* (insider). Alice and her mother had allowed me to become a part of their lives and this search as Glesne (1999) states lead me into their lives, into my own discipline, my practice, and myself.

Literacy learning

Assessment results (Term 3, Kindergarten)

Print and paper-based literacies

The table below describes in tabular form Alice's:

- knowledge of sight words (Johnson Word List, Appendix H);
- development of phonemic awareness (SPAT, Appendixi I); and
- level of reading ability as measured on the PM Benchmark Kit (Appendix J).

Alice's Scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Rankings: Below (expected level), At (expected level), Above (expected level)

Johnson Word List (List A)	Sutherland Phonological Awareness Test (SPAT)	PM Benchmark Reading Level
23/25	49/58	15
Above	Above	Above

Table 6.3 Alice's scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Technology skills

The following table demonstrates Alice's technology skills. The skills listed have been summarised from Early Stage 1 (Kindergarten) capabilities from the NSW DET document *Computer-based Technologies in the Primary KLAs* (Appendix K).

As shown in Table 6.4 (overleaf), Alice's scores in her technology skills in all capabilities are beyond the expectations of kindergarten children in Term 3 of the year. Expectations for children in Kindergarten at the end of Term 4 would be *'At'.*

Early Stage 1 (Kindergarten) Technology Capabilities

An Assessment of Alice's Techno-literacy Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Below	*At*	*Above*
Identifies the basic parts of computers and their functions.			✓
Uses and understands computer terms.			✓
Experiments with using the computer mouse and keyboard.			✓
Views and discusses graphics on the screen.			✓
Experiments with paint or draw software to see how it operates and the effects that can be created.			✓
Uses computer software programs to create texts.			✓
Uses drawing software to create pictures for scribed texts.			✓
Accesses and inserts a picture from a file.			✓
Understands how the internet can be accessed and used.			✓

Table 6.4 An assessment of Alice's techno-literacy skills

Summary: Alice

Alice's family was situated in the middle bracket of socioeconomic status. The family lived in their own home and both parents had part-time employment. Alice's father had a Bachelor's Degree in Early Childhood and Special Education. Alice was the only child living at home with her parents. All of these factors impacted upon Alice's literacy development.

Extended family members, siblings and friends did not play a major role in Alice's early literacy development. Alice had weekly contact with grandparents prior to enrolling at school, due to her mother's work commitments. She also attended a preschool that valued reading. But, otherwise Alice's parents have been the ones who have encouraged and supported Alice's early literacy development. The majority

of Alice's early literacy development was with print and paper-based literacies. This observation was reinforced by the following comment by Alice's mother.

> While we have CD-ROM pre-reading activities, we prefer to focus on reading books and magazines and street and road signs.
>
> (Parent Questionnaire, March 2005)

However, Alice's mother has commented that Alice liked to use the computer even though she only seldom used computer games and did not use email or the internet.

The following comments recorded in the anecdotal records provide a clear indication of Alice's parents' support for Alice's learning.

> When Alice came home from school, she usually wanted her parents involved with what she did but was also happy to play by herself. Alice preferred to play with someone rather than playing alone.
>
> (Alice's mother, Parent Focused Interview, 27 April 2005)

> Both parents gave Alice positive reinforcement with 'gold star' books as rewards.
>
> (Alice's mother, Parent Focused Interview, 27 April 2005)

> Alice asked to have a street directory in the car so that she could follow the map.
>
> (Alice's mother, Parent Focused Interview, 27 April 2005)

> Alice was enthusiastic about reading her 'sight words' sent home from school each week.
>
> (Anecdotal Records, Home Visit, 18 May 2005)

Alice's mother had spent a considerable amount of time organising the *'sight words'* sent home from school each week. She had written the words on large pieces of cardboard so that she and Alice could play games with them to reinforce Alice's recall of the words. Alice's mother said that Alice was enthusiastic about reading these words. My observation was that Alice's mother was also enthusiastic and put a large amount of time and effort into supporting Alice's learning of the words. It was a learning time that they shared together and when Alice came home with a special

award for knowing all her '*sight words',* Alice's mother seemed as happy as Alice. Alice appeared aware of her mother's delight and she seemed to understand that her mother was proud of her efforts. I did not observe Alice's father's response to the award, but all other information gained at the initial focused interview indicated to me that Alice's father would have been equally proud of Alice and her efforts. Both parents gave Alice positive reinforcement for her efforts and achievements.

With print and paper-based literacy experiences, Alice's home environment was '*literacy-rich'*. She was the only child living at home with two parents who had time available, and spent valuable time with her, teaching, encouraging and supporting her learning. Her father had knowledge from his training in both early education and special education fields.

Alice had highly developed communication skills. She interacted well with adults asking relevant questions and responding appropriately to questions asked. Alice had high self-esteem, and seemed motivated and eager to learn. She focused on tasks and listened well. Alice persevered and took risks with her learning. She was not afraid of failure and would always '*have a go'.*

Alice was reading far beyond the expectation for kindergarten children. In July, the beginning of Term 3 of the school year, she had a large repertoire of known *'sight'* words. Her phonemic awareness skills were beyond expected levels as demonstrated on the SPAT and she was competently reading at Level 15 on the PM Benchmark Reading Kit with complete understanding of texts read.

Alice enjoyed drawing and writing and had done since she was two years of age. Writing materials were always available in the home, Alice requested writing materials as gifts and Alice's parents bought her writing materials. Alice held her pencil well and seemed keen to write. She spelt out letters to her mother and checked if they were correct. The home environment encouraged Alice's drawing and writing. The following comments were recorded in the anecdotal records.

> In the rest of the home were a lot of creative items, and toys for Alice to play with. It was a 'friendly feeling' home with a most creative influence. It had a 'busy' feel rather than having everything neatly in its place.
>
> (Anecdotal records, 27 April 2005)

> Alice was encouraged to write and draw. There were a lot of creative craft items for Alice to use. Alice wrote and drew a lot.
>
> (Anecdotal records, 4 May 2005)

Despite the fact that Alice did not use the computer frequently, she was capable of using programs on the computer to reinforce her literacy skills (*Fun on Alphabet Farm CD and ABC Kids site*) and she also used her reading skills to enjoy some of the programs (*ABC Dinosaur*). Alice used her writing skills on the computer to write letters to friends. She was also confident in using the mouse and typing on the keyboard, although she had to look closely at the letters to find the correct letters to type. Several comments supported Alice's infrequent use of the computer.

> Alice seldom uses a computer involving reading and seldom reads instructions for games, building equipment or videos etc. Alice sometimes reads other material as well as books including comics, magazines, TV programs etc. and she often reads signs in the wider community.
>
> (Alice's mother, Parent Questionnaire, March 2005)

> While we have CD-ROM pre-reading activities, we prefer to focus on reading books and magazines and street and road signs.
>
> (Alice's mother, Parent Questionnaire, March 2005)

> It is mostly daddy's computer because he is the one who uses it. I only know how to use it a tiny bit. I know how to put the disk in and out and I know which buttons you press and mummy knows how to work some bits.
>
> (Alice, Interview, 11 May 2005)

> Alice's mother reported that Alice had not been on the computer since the previous week when I had visited.
>
> (Alice's mother, Interview, 18 May 2005)

Alice's infrequent use of the computer did not seem to have any adverse effects on her progress with techno-literacies. Also, her use of technology seemed to impact only in a minimal way on her literacy development while her highly-developed print and paper-based literacy skills assisted Alice in the development of her skills on the computer.

Figure 6.4 provides a model of Alice's learning in her home in the first year of school. This model has resulted from parental information gathered from the initial questionnaire, focused interviews and discussions. The model has also drawn upon information collected through systematic observations, focused interviews, discussions and assessments during multiple home visits.

A Model of Alice's Learning Journey at Home in the First Year at School

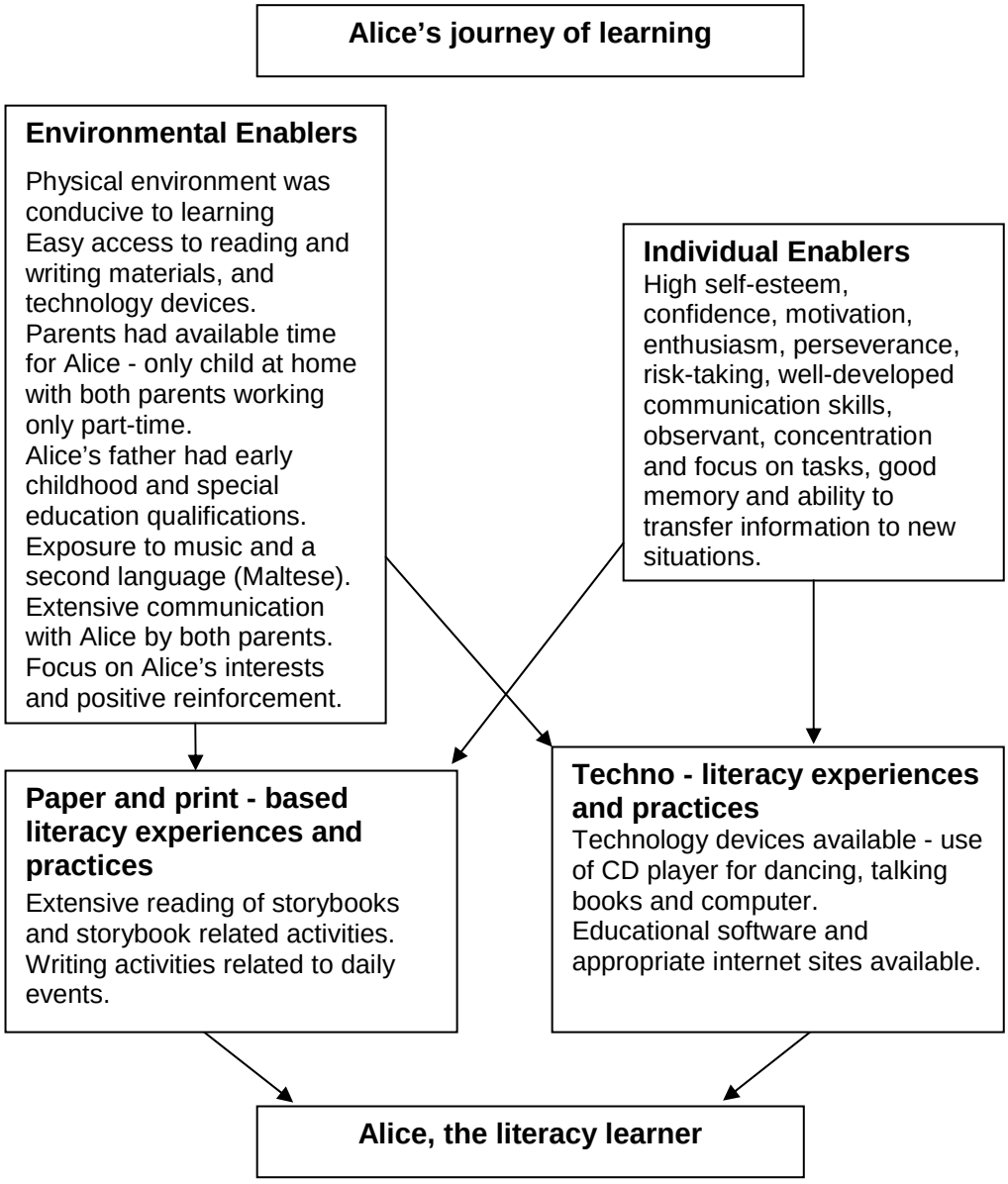

Figure 6.4 A model of Alice's learning journey at home in the first year at school

Alice's story has described in detail, data gained from the initial questionnaire, focused interviews and discussions with Alice and her parents, and assessments and

systematic observations of Alice in her home environment. In the next case study story, the journey of Adam from School 2 will be presented.

Case Study No. 2: Adam

Background information about Adam

Adam attended Kindergarten at School 2 as a student in one of two kindergarten classes. Adam's age at the time of the first interview with his mother was 5 years and 7 months.

Adam was a friendly and happy child, with a quietly confident disposition. His mother described him as '*a very sweet little boy'* and said that *'everyone loved him'.* Adam was a cooperative child who was eager to complete any activity that he was asked to do. He had an agreeable personality and beautiful manners and spoke and acted caringly towards both his mother and his little sister.

Adam's mother was supportive of Adam's learning but admitted not teaching him how to read or write because she was afraid she might '*do it wrong'.*

The six weekly visits were made to Adam's home for approximately an hour and a half each visit with the first visit being made while Adam was at school. Adam's mother and his younger sister were present at this first visit where Adam's background and his parents' views were discussed using the information from the initial parent questionnaire (Appendix A) and questions from the parent focused interview (Appendix F). This information provided an insight into the factors impacting upon Adam's development. During the six visits that I made to Adam's home, I only once, very briefly, met his father.

On subsequent visits Adam was observed in his home environment with print and paper-based literacies and working on his father's laptop from work. Many topics, mainly about Adam's learning and activities with the family and at school, were also discussed with both Adam and his mother. Anecdotal notes were recorded and conversations were audio taped.

Adam also completed a technology interview (Appendix G), and his phonemic awareness (Appendix I) and reading skills (Appendix H and J) were assessed.

Each afternoon that I visited, Adam happily participated in all of the activities while his little sister had afternoon tea in her high chair, and then played with her toys. Adam's mother was usually occupied with Adam's little sister or was busy preparing dinner.

Interpretive comment about Adam

It was apparent from this first meeting with Adam that he was a cooperative child who would be easy to work with. He was also friendly and seemed at ease talking to adults, even an adult that he did not know.

It was important to note that Adam's mother felt that she was inadequate because of her lack of knowledge about how to support Adam's learning. Adam's mother expressed that she was very enthusiastic about my research and she thought that being involved as a case study parent would assist in her knowledge of ways to support Adam in his learning.

Each afternoon, Adam's mother looked forward to my visits. It seemed she thought at length between visits about the activities I was doing with Adam and would ask questions about the benefits of these activities. She would also seek my opinion about Adam's learning and his progress at school.

I observed that the afternoon routine was always the same. Adam and his little sister would have afternoon tea on Adam's return from school while their mother would begin organising the evening meal.

Environmental factors

The home

Adam lived with his mother and father and two-year-old sister on the second floor of a large block of units in a relatively quiet street, despite the fact that on the other side of the units was the main highway into Sydney. The family had lived in six other residences in the Sydney metropolitan area including houses, villas and units, prior to moving to their current residence.

The unit had a combined lounge and dining area with a small kitchen attached to this room. The front of the lounge area opened onto a balcony. This lounge, dining area and the balcony also doubled as a play area for the children. Adam and his little sister had a play tent that remained assembled throughout my visits – the tent being housed on the balcony on sunny days and being brought indoors in the cooler weather. There were many toys scattered around the floor of the lounge room and the balcony.

Adam had a small table in the corner of this room where he stored several art and craft, and reading materials, although he also worked at his activities on the main dining room table. A large bookshelf along one wall contained many books, several of which were books for the children. Adam's mother had reported that she had bought these books at sales for the children to read when they were older.

Adam's father's laptop for work was on a small study table in the corner of the room. There was no broadband connection, with access to the internet only available through 'dial-up' connection. The laptop was connected to a printer.

Like in many homes, Adam's work and his sister's art and craft adorned the refrigerator.

Interpretive comment about Adam's environmental factors – The home

Adam had experienced seven different places of residence in less than six years. These places were also different kinds of housing. Although Adam had moved several times he was always in the loving care of both of his parents, and their

moving residences did not seem to have any detrimental effects on Adam's development.

It was apparent that the limited space in the unit did not limit the children's play, apart from the fact that their unit was not on the ground floor and there was, therefore, no access to a back yard. The main room of the unit, though, was used as a playroom with the balcony area also being accessed for play. The unit seemed 'busy' and had a 'friendly' feel to it. Adam's mother was accepting of the children's playthings being spread around the room. She did not seem to be concerned about toys being all around the floor of the main room as I never heard her ask the children to pack away the toys.

Adam had his own 'space' in the main room for his own materials for writing and art and craft. The bookcase of books was also accessible to Adam.

Adam, however, had limited access to technology. His father's work laptop was not for general use and broadband access to the internet was not available.

It was evident that Adam's parents valued and supported their children's learning. There was a display of their artwork on the refrigerator and the children's playthings were also an important part of the family's daily living. Their playthings were never confined to their bedrooms as in many homes.

Adam's mother was very trusting. On my second visit, she left me with Adam's little sister while she went to fetch Adam from the unit downstairs. In her absence, Adam's little sister was busily pulling out the money from her mother's wallet. I expressed my concern when Adam's mother returned, asking her to check the money to be sure it was all accounted for. Adam's mother was not worried and said, *'She is always playing with my money'.* I felt apprehensive about this situation for two reasons. Firstly I had been left with full responsibility of the little girl when I was almost a complete stranger. Secondly I was being trusted with the mother's money. Adam's mother, though, was not perturbed and brushed my concerns aside.

The people

Before Adam was born, his mother had worked in church welfare, specialising in working with youth groups. Adam's father was a courier and had also worked with youth groups at the various churches they had attended.

Adam's father had a lot of contact with Adam, although his mother was the main carer and when Adam's sister was born, Adam's father and grandparents cared for him. Adam's sister was almost four years younger than himself. Adam's mother reported that Adam was very excited about his sister's birth.

Adam had stayed overnight once a week with his maternal grandparents for several years and now stays with them, once a month, on Saturday nights. The family also lived with another couple of the same age for a short period of time.

Adam has always had a lot of contact with adults at home, at his grandparents and at church, and in his first few years, he had little contact with other children. Now he frequently played with the children in the units. There were about seven children living in the same block of units with ages ranging from twenty months to ten years.

Adam has attended Sunday school each week since birth. Since he was four years of age, he has gone to soccer training and played soccer on Saturdays. He also attended boys' fitness classes once a week. Adam now goes to school friends' houses after school, and once a week, he goes to one boy's house before school and goes to school with him and his mother.

Interpretive comment about Adam's environmental factors – The people

It was apparent that Adam's family was involved in church activities and volunteer work and it was also evident that Adam's father when not at work, or involved in volunteer work, spent time with his family. Also, Adam's mother valued being a 'full-time mum'. The extended family was also supportive.

Despite Adam's being an only child for almost four years, I never observed any jealousy between Adam and his sister.

I observed at my first meeting with Adam that he felt at ease around adults. The frequent contact with his grandparents and also with the other family that Adam's family had lived with had given Adam many opportunities to develop his skills in communicating with adults. Adam also had contact in his early years with adults in the 'church' family. His early development, therefore, was more influenced by adults

than other children. Particularly since Adam had started school, children were now a greater influence in Adam's life than they had been in his early years.

Early learning experiences

Adam's mother reported that she and Adam's father did not read often and Adam would not see them reading. Adam read signs in the community prior to going to school and he loves learning at school. Since Adam was a new-born baby, his mother had sung to him daily but Adam recently asked his mother to stop singing to him.

Adam's mother read to him almost every night and read to him about once a week in the daytime. Adam's father and his grandparents also read to him about once each week, both at bedtime and during the day.

When reading to Adam, his parents 'very often' participated in a variety of reading activities including discussing and naming the pictures, talking about the meanings of words, and discussing rhyme. Adam also asked about the meanings of words. Adam's mother did not tell Adam the names or sounds of letters as she had always been afraid of *'doing it the wrong way'.*

Adam 'often' asked to be read to, read to himself, memorised books read to him and asked for favourite books to be read. He 'sometimes' attempted to read to others. He enjoyed a variety of books and loved books that informed, surprised or rhymed. Favourite books included Dr Suess books, a children's Bible, a picture dictionary and any books about dinosaurs.

The family often visited the council library and on library visits, Adam 'very often' chose his own library books and his mother 'sometimes' helped Adam to choose appropriate books. Adam had his own library of approximately 160 books at home. These books were purchased by Adam's parents from markets and from Book Club at school, and Adam also 'very often' received books as gifts.

Adam 'very often' read other material as well as books including comics, magazines and TV programs and he 'very often' read signs in the wider community. Adam 'often' read instructions for games, building equipment or videos but 'seldom' used a computer involving reading.

Adam ‘very often’ asked for writing materials and received these as gifts. Writing materials were always readily available in the home. Adam ‘very often’ wrote his name, letters of the alphabet and words, and ‘sometimes’ wrote others’ names, and wrote about events or possessions but he ‘seldom’ used the word processor on the computer to write. Adam scribbled and drew from approximately eighteen months and asked for writing materials at around three years of age.

Since Adam started school, his mother ‘often’ taught him to read and write words. She reinforced his ‘sight’ words with him each night and helped him to find these words in books. Adam asked his mother how to write words and then she either wrote them for him or told him how to write them by spelling the letters in the words. If he didn’t know how to write any of the letters spelt, Adam’s mother showed him how to write the letters and Adam chose to write.

In the home, there were three home/mobile phones, two CD/tape players, one TV, one video player, one DVD player and one laptop.

Adam was allowed to choose his own videos and was encouraged to use the phone. He did not use the laptop by himself. There were no games on the laptop but he played computer games at his grandparents’ house. At home he had his own Leapfrog Pad.

Adam ‘sometimes’ used the internet. He only ‘seldom’ used programs on the computer, received or sent emails or used talking books on CD or tape. Adam ‘never’ used multimedia CD-ROMs, portable game machines or TV game machines.

Adam received and sent emails at his grandparents’ house but he was not able to do this on his own. He also drew on the computer at his grandparents’ house. He knew about eBay as he looked at it with his mother. He could turn the computer on and off and learnt how to reboot it at school.

In the initial parent questionnaire, Adam’s mother wrote,

Although I believe technology has a valuable place, I am concerned that we use it too often and that it may take the emphasis off reading and learning basic skills. I also think it can create social problems if a child is always using the above technology mentioned.

(Parent Questionnaire, March 2005)

Adam attended occasional care one day each week from six months of age. He went to preschool at two and a half years of age, for one day a week, and at three years of age, for two days each week.

The family was involved in church activities. Adam's father taught Sunday school every week and the family went to church every Sunday. After church each Sunday, Adam's family attended many social activities with other families from the church. The family also socialised on many other occasions with groups of friends from the church. The family went on holiday once a year with a church group.

Interpretive comment about Adam's environmental factors – Early learning experiences

Although Adam's parents did not role model reading at home, they and other family members had consistently read books to him. Compared, though, to other children at School 2, Adam's school, Adam was read to less than the other children. On average the children at School 2 were read 10.6 books each week. Since starting school Adam was displaying that he enjoyed reading.

Adam's mother indicated that she did not really know why Adam no longer liked her to sing to him.

Adam's parents participated in reading related activities like other parents at Adam's school and other parents in this study. Adam's parents, though, did not teach Adam about the names and sounds of letters. Adam's mother expressed that she was not confident about how she should teach Adam the names and sounds of letters of the alphabet. This comment is consistent with research by Cairney and Munsie (1992, p5) that states, '[i]t is likely that most parents are willing to help with their children's education, but many may have little idea concerning how to provide this help'.

It was evident that Adam enjoyed reading and having a wide variety of texts read to him. Adam's parents also displayed to Adam that they valued reading by taking him to the library. And as McLane and McNamee (1990, p90) state, '[y]oung children pay attention to what they see powerful and significant people in their world doing, and they imitate behaviours that seem to be important to these people'.

Adam also enjoyed reading other media texts. It was apparent, though, that reading on the computer was very infrequent. These results were consistent with other children in this current study. Adam was interested in a variety of writing tasks but infrequently used a word processor for writing. It was apparent that Adam's mother wanted to support Adam's literacy learning and since he had started school, she helped him with his reading and writing.

Adam's results were consistent with other families in this study who owned at least one of the listed technology devices except PDA and MP3 players. But compared to other children in this study, Adam was less likely to use technology devices at home because of limited availability. However, Adam had access to computer programs and email at his grandparents' house. Adam's experience is consistent with findings by Jane and Robbins (2004) that many grandparents support the technology thinking and learning of their grandchildren.

Adam's mother saw more value in print and paper-based literacies and it seemed she believed there was a detrimental effect of technology on the development of social skills. This fear, though, could have been unfounded as it is not consistent with findings by Hill (2004, p11) that state, 'children chose to work in pairs or in groups and … there was talk, problem solving and enjoyment from playing games and creating documents'.

It seemed that although Adam mainly had the influence of adults in his early years, he also had contact with peers of his own age, and older and younger children at preschool. It was apparent that Adam's family had an extended family at church and this extended family would have impacted upon Adam's early development. As stated by Neuman and Roskos (1997, p10), 'children's earliest discoveries about written language are learned through active engagement with their social and cultural worlds'.

The child

Intrapersonal characteristics

Adam presented as a quiet, sensitive and happy child with beautiful manners. He was as his mother had described *'very sweet'.* He spoke quietly and sweetly, and moved about the unit in a quiet and unhurried manner. He was caring towards his younger sister and never seemed to be frustrated by her, as many older brothers often are with younger siblings, especially when they interrupt their play, or break down their constructions.

Adam listened well to every instruction and would agree in his quiet way with whatever he was asked to do. He focused well on tasks presented to him, asked questions to seek clarification and persevered, always giving his best effort in all activities. Adam said that he loved school and his mother also reported that he loved school and learning. Adam had a good sense of humour and often told me jokes. He was also happy to join in with his mother's jokes.

On various visits, the following comments were entered in the anecdotal records.

> That day Adam's mother had visited school and Adam was very excited that his mother had come to visit – it was Open Day during Education Week.
>
> (Home Visit, 19 May 2005)

> Adam came out into the hallway to greet me and excitedly said 'Do you want to see how I go on the internet? It is the thing with the big 'e' on it'.
>
> (Home Visit, 9 June 2005)

> Adam was very excited. During the week, on the laptop his dad had installed a computer game called 'Bionicle', for Adam to play.
>
> (Home Visit, 16 June 2005)

Some of Adam's likes at home included:

- playing with daddy at the weekend;
- playing a card trek game and air hockey;
- watching TV – especially dinosaur shows;
- craft and painting;
- playing with jig-saws;
- playing cars;
- playing with his little sister; and,

- playing with the kids downstairs.

Some of his likes at school included:

- making decisions about what to play with his friends;
- learning things;
- computer lessons, a little bit;
- reading in class – the teacher reading to the class and reading on his own; and,
- maths.

Interpretive comment about Adam – Intrapersonal characteristics

It became apparent from the first meeting that Adam would be an easy child to build rapport with, and work with. He demonstrated skills of cooperation and he seemed '*at ease'* with me.

Adam displayed well-developed listening skills and he was not afraid to ask questions. He always tried hard and persevered with given tasks. It seemed Adam had a thirst for knowledge and enjoyed everything he did at school. Adam displayed a love for his mother and a real sense of pride in the fact that she had visited him at school.

Adam had a wide variety of favourite activities at home including activities that he did by himself and activities involving others. At school, Adam mostly enjoyed learning and it was interesting the way in which he phrased playing with his friends. He liked '*making decisions about what to play with his friends'*; he didn't actually say he liked playing with his friends. By this comment, it seems that Adam was confident in being in a leadership role, making the decisions when playing with his friends.

Observations from home visits

Home visit on 19 May 2005

On my first visit, I was quickly accepted by Adam and he talked about all of his friends and told me their names.

Adam was happy to share his knowledge and the things he could do. He read the numerals from 1-10 that he had written at school. He wrote these numerals in order without any errors. He could not be tricked in the recognition of the numerals by changing the order from 1 to 10. He could also recognise the numerals up to 30. He was focused throughout the task.

Adam showed me his '*home reader'* that he had brought home from school; we discussed all the pictures in the book and he read the book to me. Adam was focused on the words in the book as he read.

Adam wrote his name accurately. His pencil grip was appropriate and his letters were well formed with consistent size.

Adam read the words under alphabet pictures on a worksheet from school. He used his knowledge of letters and sounds to read simple words and using picture cues, he could work out words as difficult as *'elephant'*. He read *'I can see an elephant'.*
Adam could sequence the pictures from the nursery rhyme '*Little Miss Muffet'* that he had also completed at school that day.

Adam knew the sound of the letter *'p'* and then could find pictures of objects that started with the sound *'p'.* He found pictures beginning with several other sounds. He knew the double sound '*ck'.* He said it made a louder '*ck'.* Adam had several worksheets where he had to match the words with the pictures. Adam had several (approximately 20) *'sight'* words on small pieces of cardboard that had been sent home from school eg. *'the, home, school, baby'.*

Adam tried to read some books from the bookshelf in the main room but the books were at a reading text level that was too difficult for him. He ran his pen over the words, trying to sound them out and when he didn't know a word, he would say *'I don't know'.*

<u>Interpretive comment</u>
Considering the fact that Adam's mother said she had not taught Adam to read or write prior to his attending school, he was competent at early kindergarten tasks. He recognised all numerals to 30, accurately read his '*home reader'* and had well developed fine motor coordination. He formed letters correctly and could write his name. Adam could blend well when he read, blending the sounds of the letters to

read words. He blended simple *'cvc'* words and used blending skills and picture cues together, could work out more difficult words like '*elephant'.*

Adam's sequencing of the nursery rhyme above demonstrated his understanding of the order of events in the rhyme. Adam displayed he was competent at the matching task to match the letter with the beginning sound of the displayed pictures. He knew single sounds and some double sounds.

It was evident Adam could correctly read most of the given words from school and, even though they were *'sight'* words, if Adam did not know the words by '*sight'* he could work them out using his knowledge of single sounds. Adam was competent at sounding not only '*cvc'* words but he sounded out more difficult words including *'look, toy'.*

Despite the fact that the text in the books Adam had at home on the bookshelf was too difficult for Adam to read, he understood how to use one-to-one correspondence and matched every word he said by pointing to a word in the text. He would always say a word for every word he ran his pen over. He also displayed perseverance and didn't give up just because he did not know the words by *'sight'* or could not sound them out.

Home visit on 2 June 2005

The family had one laptop that belonged to Adam's father and was used for his work. There was no external mouse. Adam had little access to the laptop. Adam's mother mainly said this was because they were afraid it could be broken and that they could not afford to have it fixed.

Adam's mother turned on the laptop. Adam used the mouse pad on the laptop, working his fingers over it and clicked on the left hand button. Adam put his ear to the laptop. He commented '*you can hear if it is working'*. Adam clicked on *'Start'* and then on '*Microsoft Word'*. He pressed '*Caps Lock'* and then pressed it again to take off the '*Caps Lock'*. He knew that was how to type a capital for his name. He said he had learnt it at school. He searched around the keyboard for the letters of his name. He knew the letters of his name and eventually typed *'Adam'*.

At school, Adam had learnt the functions of both the '*Space Bar'* and the *'Backspace'*. He knew the function of *'Enter'* and could insert a picture using *'Insert'*, then clicked on *'Picture'*. He could type in words in the 'Search' button to find the picture that he wanted, although he could not read the words with the pictures. He said the names of sounds and clicked on *'Modify'* to return. He clicked on the '*red cross'* in the right hand corner of the screen and said '*that takes it away'*.

Adam returned to finding pictures. He saw the word '*house'.* He said *'that is one of my sight words'* (from school). He got down from the laptop and spread his sight words (written on small pieces of cardboard) all over the floor. Adam could recognise his sight words looking at them upside down. Adam looked at his sight words and then, back at the laptop, typed in '*home'.*

Adam followed instructions well, he quickly learnt how to use new functions on the laptop and he displayed a good memory. When asked how he knew many of the functions on the laptop, his reply was that he was told how to do it at school. He closed down the laptop.

<u>Interpretive comment</u>

Adam had limited access to a computer and it was more difficult for Adam to use the laptop without an external mouse. However, he never commented that it was harder than using the external mouse at school. Adam demonstrated that he had an understanding of several of the icons on the screen and the functions of several of the keys on the keyboard. He was also able to find the corresponding capital letters on the keyboard to write his name.

Adam was able to transfer his technology learning from school to the home setting. It was obvious by his transfer of learning from school to home that he listened well at school and comprehended the tasks given to him.

Adam displayed a '*thirst*' for learning and the ability to transfer knowledge from one situation to another. Immediately on seeing the word '*house',* he remembered his *'sight'* words from school and after checking the '*sight'* words, he confidently typed the word '*home'* on the computer. After checking his '*sight*' words, he also noticed the word was '*home'* not '*house'*. This was another example of Adam's ability to transfer learned information to another setting.

Home visit on 9 June 2005

Adam came out into the hallway to greet me and excitedly said *'Do you want to see how I go on the internet? It is the thing with the big 'e' on it'.* Adam already had the laptop turned on and he clicked on Microsoft Outlook. He said, *'I think I have to double click on digital camera'.* He clicked on the squares in the top right hand corner to maximise the page on the screen. He clicked on '*Edit Picture'* and *'Done'* and clicked on *'X'* to close. Adam then opened Microsoft Word and connected to the internet through the dial up facility. He clicked on '*Insert', 'Pictures', 'Clip Art'* and then typed in *'cars'* in the search window.

Adam typed '*This is a racing car.'* and then inserted pictures of racing cars. To write *'This'* he said the name of the '*T'* and '*H'* and pressed *'I'* and '*S'* saying the sounds as he pressed the keys. He pressed the space bar and then typed '*is',* pressed the space bar and typed '*a*'. I helped Adam with the word '*racing'.* He had managed *'ras'* by himself. He pressed the space bar again and then typed in *'car'*.

Adam's Typing on the Computer with Picture Inserts

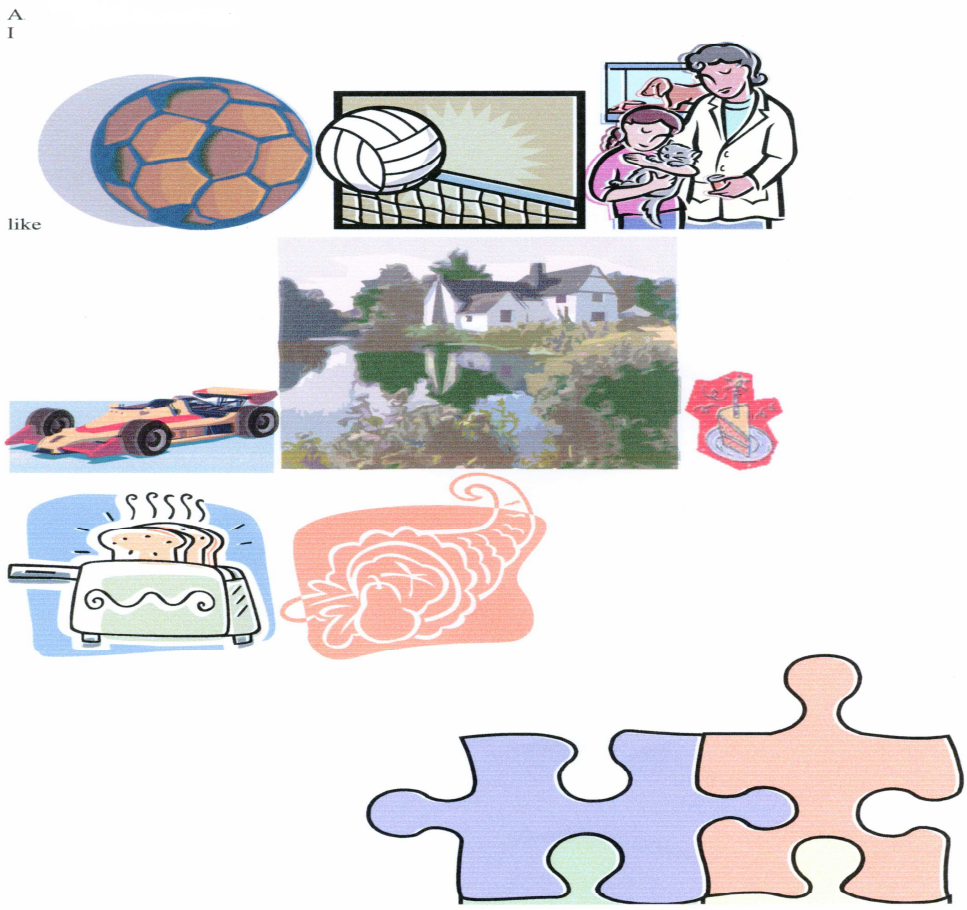

Figure 6.5 Adam's typing on the computer with picture inserts

Adam typed his name at the top of the page. For confidentiality, all letters except the *'A'* have been removed. Adam typed *'I'* and then *'like'.* He then inserted all the pictures he could find of things that he liked until he became tired of the activity.

I recorded several of the words from the laptop screen to see if on a future visit, Adam would be able to read the words in isolation, away from the environmental print on the screen.

Adam completed the Technology Interview (Appendix G). Adam said that he 'sometimes' used the laptop at home and that his father helped him. He said that he goes on the internet, and types in silly words and his own name and his sister's name. Adam said that he hadn't printed anything before and that today's piece of work (Figure 6.5) was the first thing he had ever printed.

Adam said that he didn't play his PlayStation very much, only on some days. Adam also used the computer at school but only on some days with the special teacher, not with any other teachers.

At school on the computer, Adam:

- played games;
- sometimes wrote; and,
- sometimes painted and drew.

Adam said that the special teacher showed the children how to insert pictures but the children didn't go on the internet. Adam hadn't printed anything at school.

Interpretive comment

As previously noted, Adam used his graphological skills to recognise icons on the computer screen. Despite having only minimal access to his father's laptop, Adam displayed confidence in using many computer functions. Adam's ability to transfer skills learnt at school to situations at home is consistent with findings by Hill (2004), that children are not disadvantaged by limited access to computers at home so long as there is access at school.

Adam was not afraid of making mistakes. He would type in the sounds that he could hear if he was unsure of the spelling of words. On the screen, Adam could read many of the words using his knowledge of the initial letters and because he knew the functions of the words in the toolbar that he had he clicked on.

Adam's grandparents had introduced him to email so he had some knowledge of word processing.

It is a possibility that Adam preferred playing with others than playing alone and, therefore, did not choose to often play his PlayStation. Also his younger sister was too small to play the PlayStation with him so he chose other activities.

It was apparent that, at school, the computers were not integrated into Adam's classroom learning but computers were a separate lesson delivered by an identified computer teacher that Adam called '*the special teacher'.*

Home visit on 16 June 2005

Adam was excited as during the week, on the laptop, his father had installed a computer game called *'Bionicle'*, for Adam to play. He said *'you use the arrow keys and when the light beeps, someone is going to die and pressing the space bar makes a hit'.* Adam's father had showed him how to play. Adam tried several unknown buttons saying *'I wonder what happens if I press this'.*

I began some assessments with Adam.

On the Johnson Word List (Appendix H), an assessment of known *'sight'* words, Adam read 16 of the first 25 words by sight, sounded 1 of the words correctly, attempted to sound 5 words and said the other 3 were too hard.

Adam completed the Sutherland Phonological Awareness Test (Appendix I).
Adam's total score was 36 out of 58.

He had mastered:

A: Syllabic and subsyllabic level

- Syllable counting
- Rhyme detection
- Rhyme production
- Identification of onset

B: Phonemic level (CVC)

- Identification of final phoneme
- Deletion of initial phoneme

C: Phonemic level (Blends)

- Segmentation 2

Adam was at the emergent phase in:

B. Phonemic Level

- Segmentation 1
- Blending

Adam was unable to delete the first and second phoneme in the four sample words in C: Phonemic Level (Blends).

Adam was not competent at:

D: Grapheme-Phoneme Correspondences

- Non-word reading
- Non-word spelling

I assessed Adam reading the words I had recorded from the computer screen the previous week. On the screen, Adam was competent reading all of the 5 words. In isolation from the environmental screen print, he read 2 of the words – *'Insert'* and *'Picture'* by sight. His attempts to sound the other words were '*Tools - To, Edit - Ed, Start - Sad'.*

Interpretive comment

Adam displayed his risk-taking skills during the new game '*Bionicle*'. He was not afraid of pressing the wrong buttons but actually pressed buttons and then observed what happened.

Throughout the year, Adam had been bringing home '*sight'* words from school to learn by sight. On several visits, I had observed Adam learning to read these words that were written on pieces of cardboard and he demonstrated focus with this task as with other tasks he attempted. Adam achieved well on the sight word assessment '*Johnson Word List'* indicating that he had a list of words he could automatically read by *'sight'* without having to decode the sounds in the word.

Adam was able to hear syllables and rhyme in words and could produce other words to rhyme with given words. He could also hear the beginning sound of a word. Adam could hear the final sound in a CVC word and could say a word without the beginning sound. He could separate all the sounds in CCVC and CVCC words. Adam was beginning to separate sounds in VC, CV, and CVC words. He was also beginning to join the sounds in VC, CV and CVC words.

Adam could not yet segment or delete the first or second sound in blends. He was unable to read or write non-words using his knowledge of sounds.

Adam was using environmental cues to assist his reading of words on the computer screen. He could read the words from their position on the screen because he could remember the function of that word on the toolbar. In isolation, he could read only 2 of the 5 words by '*sight'.*

Home Visit on 11 August 2005

This was my last visit to observe Adam. We spent much of the afternoon chatting about school and his friends and family. I also assessed Adam's reading level on the PM Benchmark Kit (Appendix J). I assessed Adam at Level 2, 4, and 6 using *'running records'* (Clay, 1978).

At Level 6, Adam made 3 errors and self-corrected 3 words. Reading towards the end of the text was very slow; however, he could retell the story, showing understanding of the text, and made appropriate responses to the 3 questions.

Interpretive Comment

At Level 6, Adam was reading independently with understanding.

I left Adam and his mother and little sister with feelings of sadness that the home visits had come to an end.

Literacy learning

Assessment results (Term 3, Kindergarten)

Print and paper-based literacies

Table 6.5 describes Adam's:

- knowledge of sight words (Johnson Word List, Appendix H);
- development of phonemic awareness (SPAT, Appendix I); and,
- level of reading ability as measured on the PM Benchmark Kit (Appendix J).

Adam's Scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Johnson Word List	Sutherland Phonological Awareness Test (SPAT)	PM Benchmark Reading Level
16/25	36/58	6

Table 6.5 Adam's scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Technology skills

The following table demonstrates Adam's technology skills. The skills listed have been summarised from Early Stage 1 (Kindergarten) capabilities from the NSW DET document *Computer-based Technologies in the Primary KLAs* (Appendix K).

As shown in Table 6.6 (overleaf), there is a wide range in Adam's scores in his technology skills. At home, Adam has limited access to technology and has only intermittently been exposed to the internet and some programs by his grandparents. Adam displays more potential in technology than the following scores indicate. One of the reasons for this discrepancy between Adam's potential and his performance scores is because Adam has only limited access to his father's laptop. Also without broadband access to the internet, it is difficult for Adam to access the internet on a regular basis. Expectations for Kindergarten at the end of Term 4 would be 'At'.

Early Stage 1 (Kindergarten) Technology Capabilities

An Assessment of Adam's Technology Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Below	*At*	*Above*
Identifies the basic parts of computers and their functions.		✓	
Uses and understands computer terms.		✓	
Experiments with using the computer mouse and keyboard.		✓	
Views and discusses graphics on the screen.		✓	
Experiments with paint or draw software to see how it operates and the effects that can be created.	✓		
Uses computer software programs to create texts.	✓		
Uses drawing software to create pictures for scribed texts.	✓		
Accesses and inserts a picture from a file.			✓
Understands how the internet can be accessed and used.		✓	

Table 6.6 An assessment of Adam's technology skills

Summary: Adam

Adam's family was situated in the lower-middle bracket of socioeconomic status and lived in a rented unit in a large block of units. Adam had moved several times with his parents in the five years since his birth; living in houses, villas and units. Adam had a stable and loving home environment and as his family was involved with church activities, he also spent time each week with groups of people, mainly adults. These adults, as well as Adam's parents and grandparents had played a role in Adam's early language development. Adam was familiar with an adult world and had been nurtured by many interested adults *'who loved him'.* Adam was learning to be literate from adults around him but also from his parents, as argued by Wells (1986, p34),

> Parents play a dominant role in the development of spoken language, intuitively prompting and prodding their children towards meaning making. From birth, parents treat their babies as if they are communicating with them, and they respond to them in the light of this purpose.

Adam's continuing literacy development in reading and writing, though, had mainly been the sole responsibility of his mother. As the main carer, and as Adam's mother had been at home since Adam was born, Adam's mother played the major role in Adam's literacy development, although his father and grandparents had also read to him since he was a new-born baby. Despite not reading themselves, both parents valued reading and encouraged Adam to enjoy reading, as well as reading to find information.

> We are introducing reading habits as educational and relaxing. Our child reads by himself before bed each night.
>
> (Adam's mother, Parent Questionnaire, March 2005)

Adam had storybooks read to him by his mother almost every day and occasionally each week by his father and grandparents. During the pre-school years, like many parents, Adam's mother had been afraid of *'doing it the wrong way'* and had, therefore, not taught Adam the letters of the alphabet or the sounds of the letters. She also had not taught him to read any words, however, Adam's mother when reading storybooks to Adam had involved him in literacy practices by discussing the pictures in books, talking about the meanings of words and discussing rhyme.

Adam's mother had been worried about Adam's reading and writing prior to his attending school. She had commented that she and her husband did not often read and when they did read, Adam did not observe their reading. Ryan (2000) noted that children need to observe their parents actively participating in literacy activities and Hunt (1978, p24) stated, '[p]arents unconsciously teach their children what is valuable by the way they spend their own time'.

Adam's mother said that one of Adam's good friends was a *'genius'* at reading and writing. Adam's mother thought that Adam had always been better at maths and science. However, Adam's mother was now confident, since Adam had started school, that he was achieving well in reading and writing and no longer had any concerns about his progress. She said he was easily learning his four *'sight'* words sent home each week from school.

At home, Adam initiated reading activities by asking to be read to, including favourite books, reading to himself and memorising books. He and his family also attended the

library and chose appropriate books to read. Adam was interested in writing and asked for writing materials as gifts. He wrote his name and letters of the alphabet. Adam also had many writing materials available in the home.

Adam had little experience with techno-literacies. He had a PlayStation but he said *'he didn't play it much; just on some days'.* There was only one laptop available in the home and as it was from Adam's father's work, Adam had limited access to the computer; however, his mother had introduced him to eBay when she was using the laptop for this purpose.

Although Adam had limited access to computers in his home, Adam sent and received emails, with assistance, at his grandparents' home and, also at his grandparents' home, he used a *'paint'* program.

> Through everyday, spontaneous cooperative activities, many grandparents are fulfilling an important function in supporting the technology thinking and learning of their grandchildren.
>
> (Jane & Robbins 2004, p1)

Adam had, however, been shown many functions of the computer at school and was able to transfer this knowledge about the computer and its functions, when given the opportunity, on the laptop at home. In Hill's paper (2004, p10) on her findings from the children of the *New Millennium Project*, she stated, 'many teachers commented that even if access to computers at home was limited, so long as there is access at school, the children don't appear to be disadvantaged'.

Adam's mother's comment below indicated her belief that involvement in techno-literacies could be detrimental to both literacy and social development.

> Although I believe technology has a valuable place, I am concerned that we use it too often and that it may take the emphasis off reading and learning basic skills. I also think it can create social problems if a child is always using the above technology.
>
> (Parent Questionnaire, March 2005)

Figure 6.6 provides a model of Adam's learning in his home in the first year of school. This model has resulted from parental information gathered from the initial questionnaire, focused interviews and discussions. The model has also drawn upon

information collected through systematic observations, focused interviews, discussions and assessments during multiple home visits.

A Model of Adam's Learning Journey at Home in the First Year at School

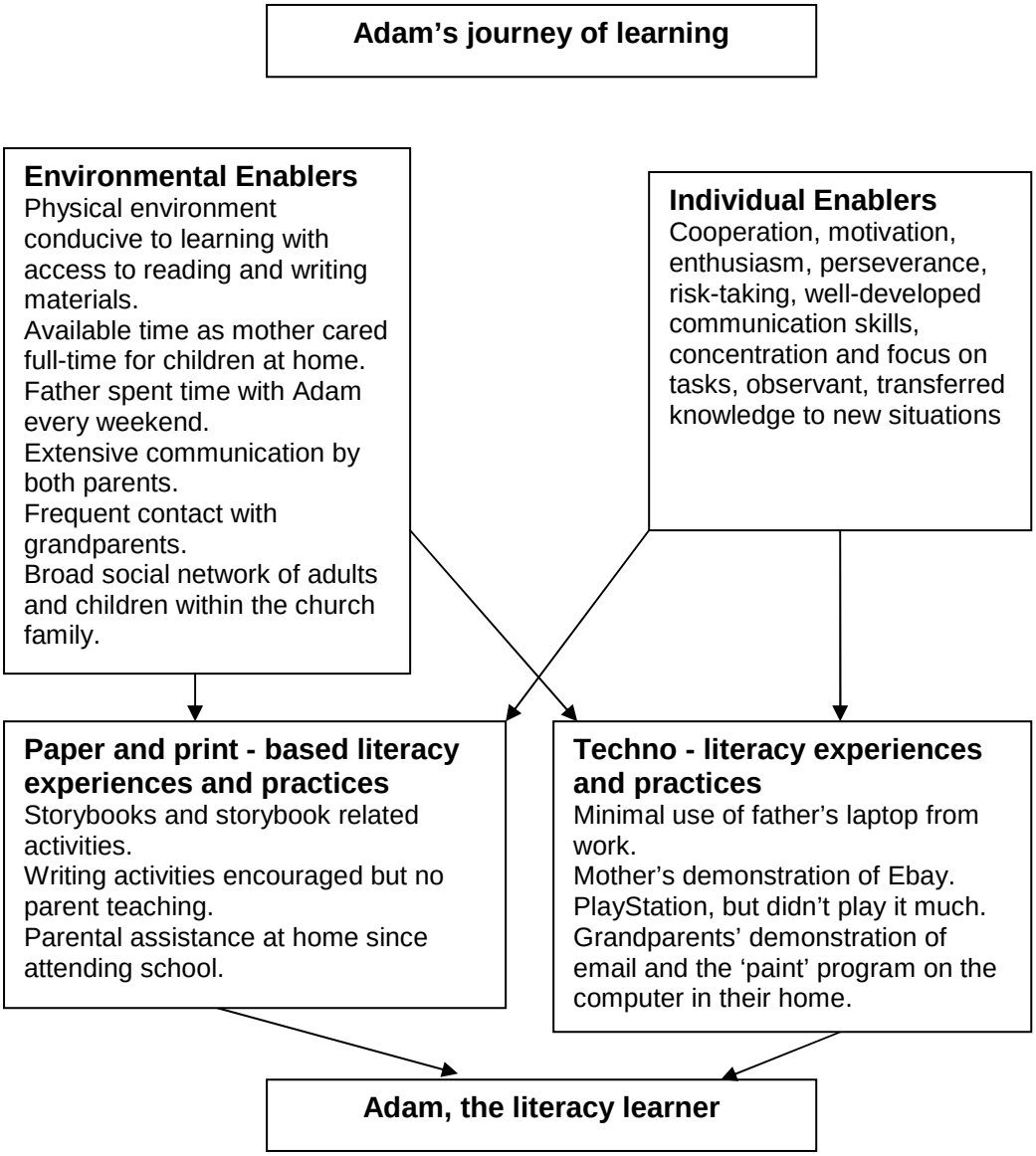

Figure 6.6 A model of Adam's learning journey at home in the first year at school

Adam's story has described, in detail, data gained from the initial questionnaire, focused interviews and discussions with Adam and his mother, and assessments and systematic observations of Adam in his home environment. In the next case study story, the journey of Alexandra from School 3 will be presented.

Case Study No. 3: Alexandra

Background information about Alexandra

Alexandra attended Kindergarten at School 3 as a student in the only kindergarten class. Alexandra's age at the time of the first interview with her mother was 5 years and 3 months.

I visited Alexandra's home five times, on a weekly or fortnightly basis, for approximately an hour and a half each visit. The first visit occurred while Alexandra was at school. At this first meeting, I had the opportunity to discuss relevant aspects of Alexandra's development with her mother, and her mother's views were discussed using the information from the initial parent questionnaire (Appendix A) and questions from the focused interview (Appendix F). I was able to establish an understanding of Alexandra's background, and this information provided a valuable backdrop to Alexandra's development. Alexandra's mother, her younger brother, twin sisters, and a close friend of her mother were present at this first visit.

Alexandra was a friendly and happy child who chatted incessantly from our first meeting. She would talk about her day at school, her friends, her brothers and sisters and what her mother was doing. She liked the attention of a visitor to the home who was specifically coming to spend time with her and talk to her.

On subsequent visits, Alexandra was observed in her home environment with print and paper-based literacies. A computer was not available for use in Alexandra's home so observations on the computer were not possible, although I asked Alexandra questions from the technology focused interview (Appendix G) and we discussed the use of technology at her cousin's house and at school. Many topics, mainly about Alexandra's learning, and activities with the family and at school were also discussed with both Alexandra and her mother. Anecdotal notes were recorded and conversations were audio taped.

Alexandra's phonemic awareness (Appendix I) and reading skills were assessed (Appendix H and J).

Each afternoon that I visited, Alexandra happily participated in all of the activities.

Interpretive comment about Alexandra

It was apparent from this first meeting with Alexandra that she enjoyed adult company and felt '*at ease'* in an adult's presence. She accepted me as a part of her family right from the beginning.

Alexandra's mother, despite her busy afternoon schedule welcomed me into her home. She was interested in discussing Alexandra's early years, her development and learning and was delighted that I would be coming to visit over the next couple of months.

On each of these visits, Alexandra was friendly, talkative and always cooperative.

Environmental factors

The home

Alexandra lived in a small fibro home in a relatively quiet suburban street with her mother and father, an older brother of six and a half years, a younger brother of three years of age and younger twin sisters who were nine months old.

This home was the third residence the family had lived in since Alexandra's birth. The other two residences were a house and a ground floor unit.

The home was busy and noisy. On entry to the home, through the front door, a closed-in verandah housed many boxes of unpacked goods, and second-hand books were crowded into two small bookcases.

The lounge room, although small, was the central room in the house and also doubled as a play room. Entry to this room was through a hall from the front door with adjoining bedrooms along both sides of the hall. Alexandra's bedroom that she shared with her twin sisters was adjoining the lounge room. A kitchen, bathroom and laundry were at the back of the house behind the lounge room.

In the lounge room, there were lounge chairs, a television, a DVD and CD player and many photographs of the children displayed on the walls and on the furniture. There were also several containers of toys and a never-ending pile of clothing on the lounge, ready for sorting and ironing. On several occasions, a friend of Alexandra's mother was visiting to help Alexandra's mother with all of the house work. The television was always turned on, although while I visited no-one ever watched any programs.

The lounge room also had barricades at all of the entrances to prevent the twins from crawling into other areas of the house.

Alexandra's bedroom was colourful with white or bright pink furnishings. Alexandra had a dressing table that was filled with pretty ornaments. She did not have a desk in her room or in any other part of the house where she could work, write or draw. She had a small corkboard on the wall of her bedroom where she proudly displayed her school merit awards, however, she had no drawing pins so had pushed the awards under the wood around the edge of the corkboard to stop them from falling out.

The back yard was level with a few large trees. The children used these trees for playing and climbing in. There were several playthings in the back yard for the children including many articles that had been made by the children themselves, out of large boxes and other recycled household materials.

Interpretive comment about Alexandra's environmental factors – The home

Alexandra's mother always apologised about the state of the house. She seemed to a proud woman and wanted to have everything neatly in '*its place'* but with so many people living in the space available and with her limited time caring for so many young children '*everything in its place'* did not really seem possible. It seemed as though the many boxes near the front entrance to their home had not been unpacked because there was nowhere left in any of the rooms in which to store the unpacked items. Alexandra's mother also apologised about the piles of ironing in the lounge room and the toys that were scattered all over the floor but as the lounge room was also used as a playroom and a utility room, it would have been impossible to have the room looking any differently.

It was interesting, though, that in a busy, noisy household, although no-one ever watched the television that it was always turned on, adding to the noise.

It seemed Alexandra's mother had been delighted that Alexandra was a '*little girl'* after having two older boys as Alexandra's bedroom was very feminine with its bright pink and white furnishings, frilly bedcover and pretty ornaments. Alexandra also loved her own room, despite the fact that she shared it with her twin sisters.

Alexandra was proud of her school achievements and showed me all of her awards, explaining why she had received them. Although, it was quite difficult to climb up and down on a chair to reach her awards from the corkboard on the wall, she painstakingly retrieved one award at a time, explaining each one's significance and then pushing it back in against the wooden edge of the corkboard.

Although on my visits all of the children crowded around me, it was apparent that the children spent much of their time playing in the back yard as there was evidence of many constructions that had been made by the children themselves.

The people

Alexandra's mother was born in Sydney; her father being born in Tonga and emigrating to Australia as a teenager. Alexandra's mother was young to be a mother of five; she said she was still in her mid twenties. Alexandra's father was a professional, international rugby player. Mostly he only had brief contact with Alexandra and the other children on weekends.

Both parents spoke Tongan and French. Alexandra's mother indicated that they spoke in Tongan to each other most of the time and that they also spoke Tongan in front of the children. She indicated that on many occasions both Tongan and French were spoken together.

Alexandra's mother did not have any concerns about Alexandra's progress at school at this stage. She reported that Alexandra's teacher said Alexandra was confident and competent. Alexandra was happy to go to school and played happily at school with her friends. She had not had any homework yet and did not as yet bring home '*home readers'*, although she corrected her brother in Year 1 when he was reading his '*home readers'.* He tried to sound out the words and she corrected him.

Alexandra's mother did not think that technology had played a part in Alexandra's learning to read and write. The family had just purchased a computer although it was not as yet installed and ready for use. Alexandra only experienced computers at the library, school, or at her cousin's house. She had made a sign for her bedroom door on the computer at her cousin's house. Her cousin (aged 16 years) helped her. Alexandra went to her house a couple of times each week. Her cousin frequently downloaded music and also played electronic games with Alexandra.

Alexandra's family had a PlayStation, but Alexandra did not often play with it. She said it was used mainly by her brothers.

There were six children in Alexandra's family. Five of the children resided at home with the family while the older half-brother had resided in New Zealand for the past two years. Alexandra was the third oldest child in the family but the second oldest living at home. The older brother living at home was one year older than Alexandra. Another brother was a year younger and twin sisters were nine months old. Alexandra was born in Australia.

Alexandra's older brother who was in Year 1 frequently joined Alexandra and myself when I visited. He listened to the stories being read and asked for help with his homework. He often asked his mother why only Alexandra had a '*special teacher'* and asked if he could have a '*special teacher'* too.

At four months of age, Alexandra's maternal grandmother cared for Alexandra full time for eighteen months in a ground floor villa. Two maternal uncles and aunts resided with the maternal grandmother while Alexandra was in her care. Alexandra's great grandmother also had contact with her three days a week from birth.

Alexandra also had close contact with her cousins – nine girls and three boys from two separate families.

Alexandra's mother had friends who often came to the house to help her with all of the work involved in caring for five young children. These friends, though, had limited contact with Alexandra.

Interpretive comment about Alexandra's environmental factors – The people

It was evident that Alexandra's mother was very busy caring full-time for five young children living at home, especially with only minimal help from the children's father as his work was demanding and left very little time to spend with the family.

Alexandra's mother's workload at home impacted on the time she could spend with each of her children and although it was apparent from conversations with Alexandra's mother that she was very interested in her children's education and that she valued their learning at school, Alexandra's mother was not able to give uninterrupted focus to the children's learning. Both Alexandra and her older brother were, therefore, excited at each of my weekly visits to have my attention and help with their school work. During those weeks, I became a '*special teacher'* to both Alexandra and her brother. Alexandra, though, had settled in happily to school routines and she also enjoyed playing *'teacher'* to her older brother.

Without access to a computer at home and with limited use of other technologies in the home, Alexandra's mother's comment about technology not playing a part in Alexandra's learning to read and write was understandable. Most of Alexandra's technology experiences, prior to school were from her visits to her cousin's house, although, now that Alexandra had started school, she had regular exposure on a weekly basis to computers. Alexandra showed no interest when I asked her about the PlayStation.

Alexandra spent almost no time by herself. It seemed that she adored her twin sisters and always helped her mother with daily tasks caring for the twins. Her relationship with her brothers was different. She often argued with her older brother and tried to control her younger brother. Her role at home was very much one of the carer rather than the sibling.

Alexandra had exposure to both Tongan and French from an early age and heard both languages spoken on a daily basis. She also had extensive contact with her extended family and these experiences would have impacted on Alexandra's early development.

Friends did not play a major role in Alexandra's out-of-school life as she had many brothers and sisters and cousins to play with.

Early learning experiences

Alexandra's mother read to Alexandra from birth almost every night and about five times a week in the daytime. Other extended family members also read to Alexandra at bedtime and during the day.

When reading to Alexandra, her mother '*very often'* participated in a variety of reading activities including discussing and naming the pictures, talking about the meanings of words, telling Alexandra the names and sounds of letters and discussing rhyme. Alexandra followed with her finger under the words while her mother read the words, and they sounded out the words together.

Alexandra '*very often'* asked to be read to, read to herself and memorised books read to her. She *'often'* attempted to read to others and asked for favourite books to be read. Alexandra's mother reported that *'Alexandra had a passion for books from a young age'.* Favourite books included *Angelina Ballet, The Book of Ballet*, *Princess* and *Fairy Queen.*

Alexandra's mother and the children *'often'* visited the council library and on library visits, Alexandra '*very often'* chose her own library books and her mother *'sometimes'* helped Alexandra to choose appropriate books. Alexandra's mother reported:

> She loves books and reading and started to pretend reading to herself from about the age of 18 months.
>
> (Parent Questionnaire, March 2005)

Alexandra had her own library of approximately 60-80 books at home. These books were purchased from garage sales and book stores and were hand-me-downs from friends. Alexandra also '*often'* received books as gifts.

Alexandra '*often*' read instructions for games, building equipment or videos. She also '*often'* read other material as well as books including comics and magazines and *'often'* read signs in the wider community. Alexandra *'seldom'* used a computer involving reading, and this was while she was at her cousin's house or at school. A computer was not available for use at home.

Alexandra loved to draw and write. She drew at the kitchen bench, on hard surfaces on the floor and in her bedroom. Alexandra was artistic. She played, acted, sang and danced in her room on her own.

Alexandra '*very often'* asked for writing materials and often received these as gifts. Writing materials were always readily available in the home. Alexandra '*very often'* wrote her name and others' names, wrote about events and possessions and wrote pretend letters to others. She *'often'* wrote letters of the alphabet and words, but only *'seldom'* used the word processor on the computer to write at school or at her cousin's house. Alexandra asked for writing materials at around 18 months of age and scribbled and drew from that time.

Alexandra's mother '*often'* taught her to read and write words. She had also taught her how to count to ten in Tongan, and Alexandra knew the alphabet in Tongan.

In the home, there were the following technology devices - TV, video player, DVD player, CD/tape player, a computer (not as yet set up and able to be used), a video camera and mobile phones.

Alexandra '*very often'* used talking books on CD or tape. Alexandra had sole use of the CD/tape player and used this when listening to her *talking books.* Alexandra's mother reported that Alexandra always stopped the player at her favourite parts and replayed them. Alexandra *'seldom'* played programs on the computer, used the internet and multimedia CD-ROMs, portable game machines and TV game machines. Alexandra *'never'* received or wrote emails. The family has a PlayStation 2 but Alexandra's brothers mainly played it.
In the initial parent questionnaire, Alexandra's mother wrote:

> Technology is an important and evolving part of learning to read and write. Its importance has increased greatly as time passes. The value, therefore, is high and significant.
>
> (Parent Questionnaire, March 2005)

Alexandra attended long day-care full-time for three years until the twins were born. She attended two days a week for the full year prior to commencing school. The family frequently participated in outdoor activities including picnics, feeding the

ducks, sports activities and athletics. Alexandra attended ballet lessons in 2004 and tap lessons in 2005. She also participated in dancing at school.

Interpretive comment about Alexandra's environmental factors – Early learning experiences

Alexandra had been cared for in her early years by a most supportive extended family. Alexandra was also exposed to many children of various ages on a regular basis.

Alexandra's mother often expressed that she would be unable to care for all her children without the help that she received from friends and Alexandra at this stage had so much company that she did not seek other friendships apart from at school.

Reading to her children was a high priority for Alexandra's mother. Alexandra had more storybooks read to her than other children at her school (School 3, av. 7.5). Alexandra was also read to at least as often as other girls in this study (av. 9.7).

Like several parents in this study, Alexandra's mother participated in many of the reading activities mentioned and spent time teaching her daughter how to read. These interactions are pleasurable and stimulating and enhance language development, as stated by Meiers (2004, p17), *'[w]hen adults and young children share book reading, they listen, talk about the story and characters, delight in repeating the words of the text'.* Alexandra, also, like other children in this study, initiated reading activities and had her own favourite books.

Like 66% of parents from School 3, Alexandra's mother indicated that she *'often'* took her children to the library, while interestingly only 28% of parents from School 1 and 15% of parents from School 2 *'often'* took their children to the library. Consistent with other parents from School 3, Alexandra's mother more often encouraged Alexandra to choose her own library books than she chose her books for her.

Alexandra's library of books was comparable with 48% of children in this study who owned more than 60 books, magazines or comics in their own libraries at home.

Like other children in this study, Alexandra used a computer involving reading less often than other related reading activities.

Comparable with other children in this study, Alexandra had writing materials available at home and participated in the wide range of writing activities listed, however, she used a word processor for writing less often than any other writing activity.

In this study, all families, like Alexandra's owned TVs, video players, DVD players, CD/tape players, computers, video cameras and mobile phones.

Alexandra had little use of any of the technology devices in her home except for the CD/tape player and she used this very frequently to listen to her *talking books.* Understandably, Alexandra did not use technology devices as often as other children in this study. Alexandra's mother believed that technology was important in learning to read and write, although, she had also reported that she did not think technology had assisted Alexandra in learning to read and write. This was probably because Alexandra did not have access to technology.

Alexandra had mixed with other children of various ages from a very young age. She also enjoyed activities with the family and her mother reported that she loved attending dance lessons.

The child

Intrapersonal characteristics

Alexandra presented as a happy, friendly, cooperative and sensitive child who was eager to please. She was always seeking approval. Her self-esteem was fragile and when she didn't succeed, she displayed disappointment in herself.

Alexandra was kind and caring towards her two brothers and was a '*real little mum'* to her twin sisters, always catering for their needs. Alexandra's mother said that Alexandra was very happy when the twins were girls as she had often felt '*left out'* with all the boys.

Alexandra was motivated in her learning, always tried her best at all tasks given to her, always wanting to learn, wanting to please and wanting to be correct in what she did. She was, therefore, not a risk-taker in her learning but preferred to keep within the boundaries, so that what she did was more likely to be correct. She was always happy when she succeeded and was proud of her efforts. She would, though, become upset if she '*wasn't right'* and would then often '*give up'.* She took correction personally and would not persevere at tasks she did not feel she could master.

Alexandra communicated well. Her teacher's description of her as a *'chatterbox'* was an apt description. Alexandra loved to talk to me from the first meeting and she often initiated the conversation. She would offer me '*a cup of tea'* and she would ask about my day. Alexandra's mother had reported that Alexandra was '*great company'* and that she had missed her when she had started school.

On various visits, the following comments were entered in the anecdotal records.

> Alexandra was a cooperative, happy and confident child. She was also obedient and had exceptional manners. She conversed happily with me within moments of meeting.
>
> (Home Visit, 25 May 2006)

> Alexandra had well developed oral language. While chatting to me, she said proudly that the teacher had called her a 'chatterbox'.

(Home Visit, 25 May 2006)

> Alexandra met me at the door. She was, as usual, excited to see me, greeting me very happily, chatting about the day at school and also about her family.
>
> (Home Visit, 3 August 2006)

Some of Alexandra's likes at home included:

- doing handstands and cartwheels; and
- playing:
    - with her dolls;
    - on the trampoline; and,
    - with her brothers inside and outside the house. Alexandra reported that her brothers liked playing with her too.

Some of her likes at school included:

- playing:
    - with her friends;
    - with toys; and,
    - in the doll's corner.
- doing school work;
- drawing; and,
- painting.

Interpretive comment about Alexandra – Intrapersonal characteristics

Despite the fact that Alexandra was only five years of age, she accepted responsibility in the family structure, always caring for her brothers and especially her twin sisters. There was evidence of empathy towards her mother for all that she had to do and Alexandra sought her mother's approval when helping.

It was evident throughout every afternoon session with Alexandra that mastery of, and success at all attempted tasks was important to Alexandra. This desire for success limited her ability to '*take risks'* because she always wanted to be right and she became upset if she was corrected. It seemed that in her mind, being cared for and loved was dependent upon her success or achievement.

Alexandra displayed enjoyment of our afternoons together and her mother reported that she questioned about the date of my return and eagerly counted down the days. Alexandra loved the attention and loved to talk. I could understand her mother's comment that she missed Alexandra when she started school.

At home, Alexandra enjoyed playing both inside and outside the house and participated in activities that she played on her own and also with her brothers. It was interesting that she commented that the boys also liked playing with her. At school, Alexandra seemed to enjoy a wide range of activities including work and play.

Observations from home visits

Home visit on 25 May 2005

Alexandra was a cooperative, happy and confident child. She was also obedient and had exceptional manners. She conversed happily with me within moments of meeting. She remained focused on the tasks we were doing together despite the young twins crawling all around the room and her younger brother interrupting all the time and throwing his ball.

The house was small and with five children, we worked together on the lounge in the lounge room. There were barriers at all doorways to stop the twins from escaping into other rooms. There was one old computer in the storage area at the front of the house but it was not set up.

Alexandra had brought home two books from the school library. These were library books Alexandra had chosen by herself, and were far too difficult for her to read. She was very excited about these books and wanted to read them but after a few attempts at the first words in one of the books, Alexandra displayed frustration at herself for not being able to read the text. I explained to her that these were books for older people to read to children so that they could learn lots of information and enjoy the story being read. After that, she was happy for me to read the books to her.

Alexandra knew that the print conveyed a message as she ran her finger along under all the words as I read them. She would attempt to mouth the words as I read them and then read them after me, pointing at the words as she said them. However, Alexandra did not understand the difference between a letter and a word and did not know that there were spaces between the words. She counted letters instead of

words when asked how many words were in the title. Alexandra would often read several words while pointing to only one word and at other times say one word while running her finger under several words. Alexandra knew that a full stop showed the end of a sentence and could recognise capitals, except for confusion with the capital *'I'* and the word '*I'.* She did not understand that capitals were used at the beginning of sentences as well as for the first letter of names.

Alexandra also initiated several reading activities including discussing the pictures and asking for the meanings of unknown words. She would also comment about other related information. On questioning, Alexandra displayed an understanding of the text read and had reported that she '*really liked the story'.* Alexandra was keen to learn and wanted to be a good reader.

At this stage of the year, the school was not sending home '*home readers'* but Alexandra had a little book that she had made at school based on a story of '*The Hungry Giant'.* She was keen to read this book to me, although even at this easy level, she needed a lot of help. As with the library book, she was pointing at the words and was not able to match the spoken word with the written text.

Alexandra had well developed oral language and would have been happy to spend the afternoon '*chatting'* about friends, her family and activities she had done.

Alexandra did some writing as described below (overleaf).

Alexandra's Writing

Please see print copy for Figure 6.7

Figure 6.7 Alexandra's writing

Alexandra's first and last names have been deleted from the page.

Alexandra could write her first and last name and the words '*mum, dad, dog, cat'.* She also wrote the sentence '*Alexandra wants to go to school and it's fun'.* She wrote her first name correctly, the *'w, s and t'* in *'wants'* although the *'t'* and *'s'* were in the wrong order. She left the *'t'* off the first '*to'* and correctly wrote '*go to'* and the '*s, c'* and *'l'* in school. She wrote the '*a'* for *'and'* and asked me to add '*it's fun.'* Alexandra used both upper and lower case letters and understood that writing goes from left to right. She also understood that there were spaces between the words. Interestingly, when reading she did not understand one-to-one correspondence. She could hear several of the sounds in the words and knew how to write these sounds. Her letters were well formed and she held the pencil correctly.

<u>Interpretive Comment</u>

The location and busy nature of the main room was not conducive to working productively with Alexandra, however, the home environment was an integral part of Alexandra's development and impacted upon her interactions with others, her

personality and her early learning. Despite the busy environment and noise, Alexandra seemed to be able to dissociate from her surroundings and focus on our conversations.

Alexandra expected to be able to read the library books that she had chosen from school and was disappointed and frustrated when she couldn't. The purpose of children taking home library books is very different from the purpose of taking home '*home readers'.* Library books are usually selected by children themselves from within an appropriate range of books in the library. The appropriateness relates to the content, not the reading level of the book, as library books assist in extending children's knowledge about specific topics; library books are usually not able to be read by children in the early years at school. Library books at this age, chosen by kindergarten children are for parents, or older siblings to read to their children for enjoyment; to develop a love of literature and to discover information.

'*Home readers'* are appropriate texts at children's level of reading ability and are taken home each night so that children can practise reading at their ability level to gain confidence in reading and also to reinforce the reading instruction from school. Alexandra had mastered early concepts about books but was confused in her understanding of letters and words. She was also unsure of the use of capital letters.

Home visit on 29 June 2005

Alexandra wanted to show me how well she could read. She said she was older and smarter now and better at reading. Alexandra had brought home *'The Very Hungry Caterpillar'* from the school library. She was trying to sound unknown words, was using the pictures to help her read, was running her finger under the words and using her memory of the text to reconstruct the story. However, like the book chosen on the previous visit, the text was too difficult for Alexandra to read by herself.

As the family computer had not been '*set up'*, Alexandra had not had access to a computer at home. She said that her mother was trying to put some games on the computer and that the *'Barbie'* game was too tricky. Alexandra said that she hadn't played with any other technology at home.

I asked Alexandra the questions on the Technology Interview (Appendix G).

At school, Alexandra sometimes used the computer in the computer room. No-one helped her but the teacher told the children what to do. Alexandra said,

> You press Control, Alt, Delete to get on and there is an arrow on the thing and then you click it.

Alexandra said that she used the *'draw'* and *'paint'* program at school and that she often printed her drawings.

On the Johnson Word List (Appendix H) - an assessment of known '*sight words',* Alexandra read only 4 of the first 25 words by sight – *'a, is, I, no'*. She sounded 3 words – '*in, it, as'*, and attempted to sound all other unknown words.

Alexandra also completed the Sutherland Phonological Awareness Test (SPAT): (Appendix I).

Alexandra's total score on the SPAT was 26 out of 58.

She had mastered:

A: Syllabic and subsyllabic level

- Syllable counting
- Rhyme detection
- Rhyme production
- Identification of onset

B: Phonemic level (CVC)

- Identification of final phoneme
- Blending

At the Phonemic Level (CVC), Alexandra was unable to segment, nor delete initial phonemes in any of the four sample words in:

- Segmentation 1
- Deletion of initial phoneme.

At the Phonemic Level (Blends), Alexandra was unable to segment or delete the first phoneme but managed to delete two of the four second phonemes.

In the Grapheme-Phoneme Correspondences, Alexandra only responded correctly to one of seven non-word reading tasks. Except for two of the seven non-word spelling tasks, she was unable to hear and write the middle vowel sound.

Interpretive Comment

Alexandra had recall of only a small number of *'sight'* words. As Alexandra's *'sight'* word list increases, she will be able to read more difficult texts without the need to sound the letters of the words. This will increase her accuracy and fluency and, therefore, her understanding of the text.

On the SPAT, Alexandra was able to hear syllables and rhyme in words and could produce other words to rhyme with given words. She could hear the final sound in a CVC word and could blend the separate sounds together to make a word but she could not break up the sounds in words or delete the first sound in a word. With blends, Alexandra could not segment the individual sounds in words or delete the first sound of a word. She was beginning to, or was at the emergent stage in deleting the second sound in blends. eg. delete the *'r'* from '*frog'* to make '*fog'.*

With the non-word reading and spelling tasks, Alexandra was experiencing difficulty, especially hearing the middle vowel sound.

Home visit on 3 August 2005

Alexandra met me at the door. She was, as usual, excited to see me, greeting me happily and chatting about the day at school and also about her family. She had brought home the home reader '*At School'* from school and very proudly wanted to show me how well she could read the text. This was Alexandra's second reading of the text as she had previously read it to her mother.

Alexandra made no mistakes reading the text. She was focused on the words, pointing to the text as she read. She could read by sight '*I like'* and used the pictures to help her with the following words *'reading, writing, singing, playing, painting, my teacher'.* She hesitated on the last page with the last sentence, as the order of the words was not the same as the other sentences in the book. She read, *'My teacher likes me.'*, mostly from memory.

On that afternoon, I had brought the PM Benchmark Kit (Appendix J) and Alexandra attempted a text from Level 1 titled '*Look at Me'*. As with the above text, Alexandra used the pictures to assist her to read several of the words – *'reading, painting, singing, eating, drinking, running, climbing, sliding'.* She self-corrected *'am'* and *'running'* and otherwise at this level could read the text without errors. She was able to retell the story and from the questioning, displayed understanding of the text.

At Level 2, Alexandra needed help to read the text '*The Balloons'*. With '*The Balloons'*, Alexandra was assisted to read the first sentence, *'The red balloon is for you,' said Dad.* She was told *'balloon'* and *'you'* and then managed to read the rest of the text without errors as the sentences were repetitive with only the colour of the balloon changing.

In the analysis of the retelling, Alexandra understood the story and had observed that the children were given the balloon that matched their T-shirt. She did not, however, understand that dad had brought four balloons because there were four children. She just said dad gave them balloons '*because they were kids'.*

<u>Interpretive Comment</u>

Alexandra was looking at the pictures to assist her reading of the first text '*At School'.* She understood that the pictures in early readers matched the text and were included with the text to assist her reading of the text.

Repetitive text also helps emergent readers like Alexandra as the flow of the language in each of the sentences is the same. She had no difficulty reading these repetitive sentences, '*I like reading, I like painting, I like singing'*, however, when the repetitive sentences changed to, '*My teacher likes me.'*, Alexandra hesitated and had to rely on her memory from past readings of the text.

With the second text '*Look at Me',* once again, Alexandra was able to use the pictures to assist in her reading of the text and along with the repetitive sentences, read the text without error, apart from a couple of self-corrections.

With the third text, '*The Balloons',* Alexandra needed a more extensive vocabulary of *'sight'* words to read the text without help.

Home visit on 17 August 2005

This was my last visit to Alexandra's home. As there was no computer available, I was unable to assess many of the criteria on the technology assessment.

She completed two more assessments from the PM Benchmark Kit. She wanted to re-read '*The Balloons'* at Level 2 again, telling me that she was smarter now and could read it better. Alexandra displayed a desire to continuously improve and she was proud of her achievements. She was told the word *'for'* but otherwise read the text without error.

At Level 3, Alexandra read '*Wake Up, Father Bear'*. She was told *'up, in, said, Here, come, said'.* She read *'mummy'* for '*Mother'* but was otherwise correct. In the analysis of the retelling of the text and the questions, Alexandra displayed understanding of the text.

Before leaving, I read Alexandra and her two brothers a few of the books that had been brought home from the school library as Alexandra and her older brother had brought home several books each.

<u>Interpretive Comment</u>

Alexandra exhibited a desire to continuously improve her reading skills and positive feedback encouraged her to continue trying. She often stated that she was now smarter than she was the previous week and, therefore, wanted to demonstrate this by her re-reading of a previous text in which she had made errors with her reading. Her re-reading of '*The Balloons'* that was almost correct demonstrated her motivation and perseverance.

With the text, '*Wake Up, Father Bear'*, Alexandra had difficulty because of her limited *'sight'* vocabulary but, although, she had to be told many words in the text, she showed understanding of the text.

Both Alexandra and her older brother obviously loved going to the school library each week and choosing books to bring home. The three children, Alexandra and her older and younger brother sat quietly and listened attentively throughout the story reading. All of them focused well. They enjoyed the stories and the time that we shared together.

Literacy learning

Assessment results (Term 3, Kindergarten)

Print and paper-based literacies

The table below shows Alexandra's:

- knowledge of sight words (Johnson Word List, Appendix H);
- development of phonemic awareness (SPAT, Appendix I); and,
- level of reading ability as measured on the PM Benchmark Kit (Appendix J).

Alexandra's Scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Johnson Word List	Sutherland Phonological Awareness Test (SPAT)	PM Benchmark Reading Level
4/25	26/58	3

Table 6.7 Alexandra's scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Technology skills

The following table (overleaf) demonstrates Alexandra's technology skills. The listed skills have been summarised from Early Stage 1 (Kindergarten) capabilities from the NSW DET document *Computer-based Technologies in the Primary KLAs (Appendix K).*

Early Stage 1 (Kindergarten) Technology Capabilities

An Assessment of Alexandra's Technology Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Not assessed	Below	At	Above
Identifies the basic parts of computers and their functions.		✓		
Uses and understands computer terms.		✓		
Experiments with using the computer mouse and keyboard.	✓			
Views and discusses graphics on the screen.	✓			
Experiments with paint or draw software to see how it operates and the effects that can be created.	✓			
Uses computer software programs to create texts.	✓			
Uses drawing software to create pictures for scribed texts.	✓			
Accesses and inserts a picture from a file.	✓			
Understands how the internet can be accessed and used.	✓			

Table 6.8 An assessment of Alexandra's technology skills

Summary: Alexandra

From four months of age, for over a year, Alexandra's maternal grandmother, together with Alexandra's maternal uncle and aunt cared for Alexandra. This caring extended family played a pivotal role in, and supported Alexandra's early language development. Her well-developed language and good communication skills were in part, a result of this early love and support.

> The child talks and learns largely from an active and spontaneous need to make sense of his experience … and the adults around him support him in his search for understanding.
>
> (Wells 1985, p70)

Since that time, as the main carer, Alexandra's mother played the major role in Alexandra's literacy development. In the initial questionnaire Alexandra's mother had indicated that no other family members read to Alexandra or assisted her with reading and writing. Alexandra's mother was supportive of, and valued Alexandra's education despite her limited amount of available time with five young children at home and minimal ongoing adult assistance.

Alexandra's mother demonstrated the high value she placed on education also by her commitment, at the school, to assist with a variety of programs. The principal at Alexandra's school had commented that Alexandra's mother was always one of the first parents at the school to offer assistance as a parent helper and she had often commented to the principal that education was so important for children. At the parent information session held at the beginning of the year, Alexandra's mother indicated her willingness to participate in the case studies and completed the nomination form on the night.

Alexandra loved to read and loved to write, as supported by her mother's comments in the initial questionnaire.

> Alexandra has had a passion for books from a young age.
> Alexandra tries to read everything.
> Alexandra writes on everything.
>
> (Parent Questionnaire, March 2005)

Alexandra's mother was proud of Alexandra's attempts at reading and writing and she was pleased that the teacher had said that Alexandra was confident and competent at school. She was also pleased that Alexandra was happy at school and that she expressed a willingness to go to school.

Alexandra's mother spent time with her, reading storybooks to her and interacting with her while reading by discussing pictures and talking about the meanings of

words, focusing on the words and telling Alexandra the names and sounds of letters, and discussing rhyme.

Alexandra was motivated to learn. She was always telling me that she was smarter now than she was the previous week. She was so keen to do her very best but often became upset if she did not reach her own goals.

Alexandra had developed a range of phonemic awareness skills and was reading at the expected level for mid-way through kindergarten. She enjoyed writing, practised writing often and had well-formed letters.

Alexandra at this stage did not have the opportunity to demonstrate her computer skills at home but she reported that she was using the computer at school, learning the functions of the keys and enjoying paint and draw programs. Hopefully, the limited amount of exposure to technology at home would not adversely affect Alexandra's future progress in using technology for learning per se, and also as a tool to aid her literacy development.

Alexandra's mother viewed her daughter as academically capable and had high expectations for her. Alexandra's mother also had a strong commitment to literacy learning upon which teachers could build and develop home/school literacy connections. Her belief in her daughter's ability to learn would be an important factor in Alexandra's future success in literacy, and in learning at school. As Baumann and Thomas (1997, p109) argued,

> Just because a family may have little money, be of a minority cultural group, or be headed by a single parent does not mean that there is not care and support for literacy learning at home.

Figure 6.8 provides a model of Alexandra's learning in her home in the first year of school. This model has resulted from parental information gathered from the initial questionnaire, focused interviews and discussions. The model has also drawn upon information collected through systematic observations, focused interviews, discussions and assessments during multiple home visits.

A Model of Alexandra's Learning Journey at Home in the First Year at School

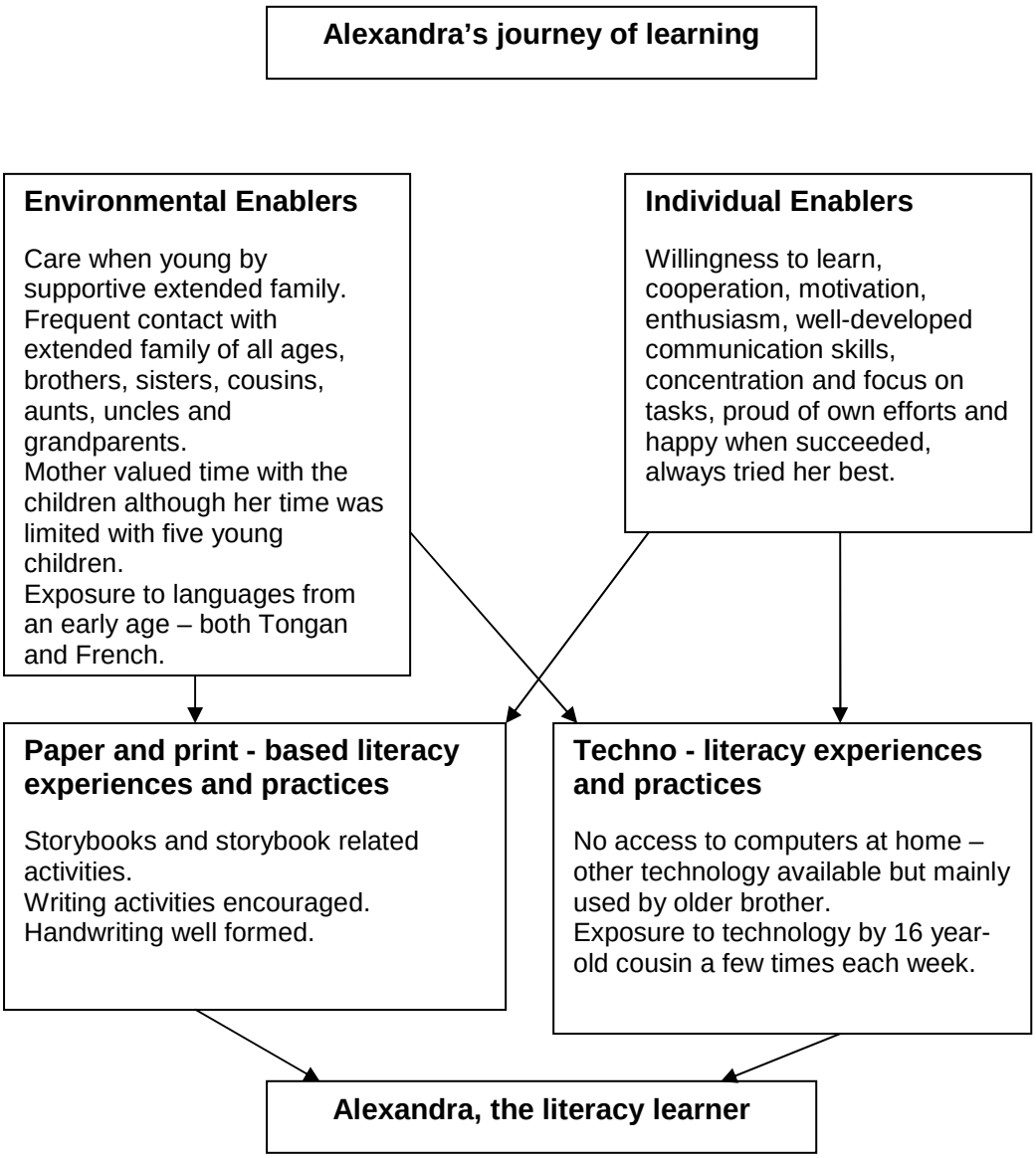

Figure 6.8 A model of Alexandra's learning journey at home in the first year at school

Alexandra's story has described in detail data gained from the initial questionnaire, focused interviews and discussions with Alexandra and her mother, and assessments and systematic observations of Alexandra in her home environment. In the next case study story, the journey of Winton from School 1 will be presented.

Case Study No. 4: Winton

Background information about Winton

Winton attended Kindergarten at School 1 as a student in one of three kindergarten classes. At the time of first contact with Winton's mother in May 2005, Winton was aged 5 years and 2 months.

Winton presented as a confident and active child but at our first meeting, he was not interested in 'accepting me into his world'. Anecdotal records from the first home visit stated,

> Winton did not warm to me on this first visit. My questions were either not answered, or they were answered in the negative. No, he did not like school and no, he had no friends and no, he did not like playing anything at school.
>
> (Home Visit,15 May 2005)

Six, weekly visits were made to Winton's home for approximately an hour-and-a-half each visit, with the first visit being made while Winton was at school. Only Winton's mother was present at this first visit where Winton's background and his parents' views were discussed using the information from the initial parent questionnaire (Appendix A) and questions from the focused interview (Appendix F). This information provided a valuable backdrop to, and understanding of Winton's development.

On subsequent visits, Winton was observed in his home environment with print and paper-based literacies and working on the family's computer. Many topics, mainly about Winton's learning and activities with the family and at school, were also discussed with both Winton and his mother. Anecdotal notes were recorded and conversations were audio taped. Winton's older sister was present at all home visits (except the first one with Winton's mother) but I never had the opportunity to meet Winton's father.

Winton also completed a technology interview (Appendix G), and his phonemic awareness (Appendix I) and reading skills (Appendix H and J) were assessed.

Interpretive comment about Winton

As recorded in the anecdotal records of my first visit, Winton did not show any interest in my presence in his home and was not interested in talking to me, answering any questions or participating in any suggested activities. However, it was apparent that I would have to develop exceptional rapport-building skills to establish a relationship with Winton as changing the nature of the group (the child) was probably not possible. As Frankfort-Nachmias and Nachmias (1996, p288) argued,

> The ease with which a researcher establishes relationships with members of a group depends to a large extent on the nature of the group and the skills of the researcher.

Despite Winton's lack on interest at my first visit, his mother was keen to persevere with the program and I looked forward to trying to build a relationship with Winton. As noted by Franfort-Nachmias and Nachmias, my skills as a researcher would be an important factor in the establishment of this relationship.

Environmental factors

The home

Winton lived in a double-storey brick home in a quiet suburban street in close proximity to the local school attended by Winton and his older sister. The home was well-presented with landscaped gardens at the front and a paved driveway leading to the double garage under the house. Winton has always lived in the same home with his family; his mother, father and his sister who is three and half years older than he is.

The home was spacious. The front foyer led to a large lounge and dining room on one side and a family room and kitchen on the other side further towards the back of the house. The family room had large windows and led onto the back balcony. A bathroom, laundry and study were also housed on the bottom floor with the bedrooms and other bathrooms on the second floor of the house.

Winton had his own bedroom. It was neat and tidy with all of the toys and books organised for easy access for Winton. Winton's mother had shown me Winton's

‘Space Poster’ in his bedroom explaining that he loved anything about space and that he had learnt the names of the planets. She said that he also asked many questions about space.

A television and other sound equipment were in the family room and the family computer was located on a desk in the study. The computer was connected to the internet but it did not have a printer. All of the family used the study and it was readily available for use by the children.

As in many children’s homes, Winton’s work, his art and craft, and his sister’s work were all displayed on the refrigerator in the kitchen.

The backyard was steep but had been landscaped so that there were several levelled areas suitable for the family to entertain friends, and also to provide play areas for the children. There was a trampoline, and a set of climbing equipment with well developed gardens set among sandstone outcrops.

Interpretive comment about Winton’s environmental factors – The home

Winton’s home was neatly furnished and well-organised. There was an absence of ‘anything’ in the house except for the necessary items needed to manage a young family.

As the home had two levels, the children had an area in the family room in which they could play, however, their playthings were always tidied away afterwards mainly by their mother. While they also had books, posters and playthings of interest in their bedrooms, these were always packed away; they were not readily accessible to the children.

This same spacious feel extended into the front and back gardens and outdoor play areas. The back yard had been terraced providing level play areas for the children and play equipment was available for use by both Winton and his older sister.

There was easy access to the outdoor play areas across a timber deck that adjoined the family room at the back of the house. While playing in the backyard, the children were in full view of their mother from the kitchen and the family room.

While there were many activities for the children to play with, there was little evidence that the children could creatively ‘make a mess’ while playing.

The people

Winton’s mother had a Degree in Economics and worked as an economist up until the birth of Winton’s older sister. She had always stayed at home with the children but now that Winton had started school, Winton’s mother said that she was interested in working, not as an economist, as the hours were too long, but in some kind of work during school hours.

Winton’s mother always spent a lot of time with the children, especially as Winton’s father went to work early in the mornings and arrived home late in the evenings. He was also often away from home for three weeks at a time, on interstate or overseas trips for his work.

Winton’s mother was well-organised. She had a system for everything and highlighted notices and information from school and had them filed in the kitchen for easy access.

Winton’s mother thinks that academically Winton is doing well at school and she does not have any concerns about his progress. She has had formal and informal meetings with Winton’s teacher and Winton has received awards and stickers from school. He is beginning to sound out environmental print around the house; for example he reads cereal packets ‘w ee t b i x’. He always listens to his sister reading her ‘home readers’ and he is matching the spoken word with the written word. Winton’s mother is always talking about the letters of the alphabet and their sounds. Winton can sound out simple ‘cvc’ words eg. cat, mum.

Winton and his sister have a few educational and a few fun games for the computer and Winton plays them with his sister’s help. However, both of the children have restricted times each day where they are allowed time to play the educational or the fun games.

Winton’s mother said that Winton knows about email as a form of communication. He types his name but didn’t know how to send emails. He uses videos but is not supposed to use the DVD player. He says he knows how to use it. He listens to audio

tapes mainly on long drives in the car and in the holidays, but only sometimes listens to them at home. Some of the earlier ones that he listened to in the car when he was about three years of age had books for him to follow the words while the story was being read. The more recent ones did not have books with them.

Winton has recently pointed out words in emails. His mother believes that one computer game Winton has used to build simple sentences has helped this development.

> I believe that children need to learn to write properly before relying on the computer. I think that many kids' computer games/programs would be of benefit in learning to read.
>
> (Winton's mother, Parent Questionnaire, March 2005)

Winton's older sister did not seem to often play with Winton. On many of my visits, Winton was involved in a disagreement with his sister. She often had friends over to play and Winton complained, '[s]he always takes over'.

Both sets of grandparents live close by and Winton sleeps over at his grandparents' houses on one or two nights each week. He stays at one of the grandparent's houses for short periods on his own eg. lunch on a Saturday. Winton also often plays with his cousins.

Winton's mother said that Winton had friends at school and his sister often had friends come over to play but as yet Winton had not played at home with other children from school or been to play in their homes. Winton had been invited to some birthday parties.

Interpretive comment about Winton's environmental factors – The people

It was apparent from conversations with Winton's mother that the children's education was important to both herself and the children's father; however, because of the father's work commitments, the children's education, on a daily basis, was mainly managed by their mother. Winton's mother had a Degree in Economics and now that she was not at work, she spent many of her hours in voluntary work at the children's school. The close proximity of the school (it was across the road from their home) made it easy for Winton's mother to be involved in school activities.

Winton's mother was exceptionally well-organised and this together with her interest in the children's education and involvement with the school meant that Winton always had his school requisites organised for him on a daily basis eg. payment for school activities, pencils and other items, homework book and home readers, items for 'show and tell' etc. Winton was supported in his education in very practical ways.

Winton's father visited the local library every week and always took one of the two children with him. He showed Winton how to find books in the library using the computer system.

Both of Winton's parents were conversant with technology and valued the role of technology in learning.

From observations, Winton did not currently have a close relationship with his sister; however, Winton frequently spent time with his grandparents on a weekly basis and his cousins were frequent playmates.

Early learning experiences

Prior to school, from a very early age, Winton had bedtime stories read to him even if it was midnight. That was his routine and he wouldn't go to sleep without his bedtime story. Winton's mother read to him almost every night of the week and about every second day, at other times during the day. Winton was also read to by his father and sister about three times a week at bedtime and also a couple of times a week at other times of the day.

When Winton was read to by his family, they would 'very often' discuss or name the pictures, talk about the meanings of words, focus on the words and tell him the names or sounds of letters and discuss rhyming words.

Winton 'very often' asked to be read to, and asked for favourite books to be read. He 'often' memorised books, from about three years of age and 'sometimes' read to himself but 'seldom' read to others.

His favourite books include *Hairy MacLary* books. *The Big Book of Knowledge*, *Jolly Pocket Postman* and Pamela Allen books.

> My son has always loved being read to and has definite favourites.
>
> (Winton's mother, Parent Questionnaire, March 2005)

Winton visits the local library every weekend with his father. Winton 'often' chooses his own books and 'sometimes' his dad helps him to choose appropriate books.

Winton has a library of more than 100 books in his bedroom. He loves to receive books as gifts and the books in his library have been received as gifts, been purchased by his parents and other family members or are hand-me-downs. Most of the books are fiction, but Winton also enjoys non-fiction books. He has 'classic' children's books and a large variety of books written by a variety of authors.

> My son loves to receive books as gifts. For his birthday last week he received non-fiction books which he is enjoying listening to, and looking at the pictures.
>
> (Winton's mother, Parent Questionnaire, March 2005)

Winton 'sometimes' uses a computer, involving reading, reads instructions for games and toys, reads other material like TV programs, comics and magazines and reads signs in the wider community.

Winton was not interested in writing before attending school. He was late in developing hand preference and is left-handed. He could write his name prior to attending school but this was a result of his mother's effort rather than Winton's interest.

> My son has had difficulty holding his pencil and forming letters and is often reluctant to practise writing at home.
>
> (Winton's mother, Parent Questionnaire, March 2005)

Winton 'often' writes his name and 'sometimes' writes the letters of the alphabet or words or writes pretend letters to others but he 'seldom' writes others' names, writes about events or possessions or uses the word processor to write.

Winton asked for writing materials from about the age of 15 months and started scribbling from this time. Writing materials are readily available in the home but

Winton only ‘sometimes’ asks for writing materials and only ‘seldom’ asks for writing materials as gifts.

The year before school, Winton wanted to know the sounds of letters and his mother ‘often’ taught Winton to read words. Since starting school, he tries to read and chooses to write. Winton’s mother ‘sometimes’ teaches Winton to write words.

> Listening to books at home has helped Winton’s love of story time at school. He enjoys this time. He loves books and through books, the teacher at pre-school was able to interest him in painting.
>
> (Winton’s mother, Parent Interview, May 2005)

> Winton is interested in science. He has a chart of the planets in his room and has studied this chart. He noticed the planets that did not have moons.
>
> (Winton’s mother, Parent Interview, May 2005)

In the family home, there are three TVs, three video players and three home/mobile phones, two DVD players and two CD/tape players, one computer and one digital camera. Winton does not have sole use of any of this equipment.

Winton ‘sometimes’ uses talking books on CD or tape, but ‘seldom’ uses programs on the computer, the internet, receives or writes emails or uses multi-media CD-ROMs. Winton ‘never’ uses portable game machines or TV game machines.

> Our computer has had problems in recent months, otherwise we would probably use it more often. Talking books are invaluable on our long car drives. Last holidays, I drove 1600km with no arguments or complaints from the children, thanks to author Paul Jennings.
>
> (Winton’s mother, Parent Questionnaire, March 2005)

Winton went to day-care at two years of age for two days each week until school entry.

The family mostly go on bike rides, work and play in the garden, visit friends or go to the library. The family also goes on picnics and goes camping in groups with relatives or friends. Winton’s mother often takes the children away on holidays on her own and goes camping and bushwalking with the children.

Prior to starting school, Winton went to swimming and gymnastics lessons once a week.

Interpretive comment about Winton's environmental factors - Early learning experiences

Winton's love of books was evident at an early age and his early literacy learning was supported by family members. Bedtime reading was a routine that Winton never allowed to be broken. At School 1, the school that Winton attended, the children were read on average 11.05 books per week. Winton's mother reported that she and family members read approximately 15 books to Winton each week.

Winton enjoyed, participated in and initiated storybook reading, and reading related activities like other children at School 1.

While only 28% of parents at School 3 took their children to the library each week, Winton went with his father to the library almost on a weekly basis where he often chose his own books compared to only half of other children at School 1. In his own library of books, Winton had more books than the other children at School 1.

With Winton's reluctance to write, he was more involved on a daily basis with reading activities. Despite the other children at School 1 reading signs in the community more often than any other reading activity, Winton showed equal interest in all other reading activities.

Interestingly, Winton's mother reported in the initial questionnaire that Winton only 'sometimes, seldom or never' engaged in technology experiences yet from the visits to his home, technology experiences appeared to be his preferred activities. Similar to other families in the study and other families at School 1, Winton's family owned at least one of most technology devices.

The child

Intrapersonal characteristics

Winton was a confident child with high self-esteem. He was quick to learn new information and he listened well when interested.

Winton was motivated to succeed at the activities he enjoyed and was strong-willed. His mother could not convince him to do something if he did not want to. Winton was always difficult to keep on task.

On the computer, Winton displayed risk-taking behaviours and was never afraid of making mistakes.

Winton had a slight hearing loss with a middle ear infection from eighteen months to two-and-a-half years and was treated with antibiotics and when he began to talk, he stuttered. He had occupational therapy at home with his mother while his name was on a waiting list to visit an occupational therapist. This resolved the problem as his mother had knowledge of what to do. Despite these setbacks, Winton spoke well at an early age.

On various visits, the following comments were entered in the anecdotal records.

> Winton did not warm to me on this first visit.
> Winton was starting to warm towards me by the end of that first visit and he was keen to know when I would be returning.
>
> (Home Visit, 15 May 2005)

> On this visit, Winton was happy to converse with me and we chatted about school and activities that he had been doing; however, he was still quite reticent, only answering briefly the questions asked.
>
> (Home Visit, 28 June 2005)

> Winton's mother said that Winton had always been very active and our reading session would often be interrupted by Winton going and completing another task, for example: changing his clothes, having something to eat or drink, running around the backyard, talking to his older sister or his mother.
>
> (Home Visit, 28 June 2005)

> He was not in a compliant mood and on my arrival and throughout my visit, Winton was having disagreements with his sister, so my visit was cut short.

(Home Visit 25 August 2005)

Winton was active and enjoyed outdoor games and sports. His mother reported that Winton liked:

- playing the computer;
- playing board games with his mother or his sister, for example, *Trouble*, *Headache*, *Rush Hour*, *Snakes and Ladders*;
- watching TV but he has never liked *Sesame St* or *Playschool*;
- playing on the swing set; and,
- outdoor activities.

Prior to school, Winton did not display much interest in writing activities or art and craft, although he had always enjoyed having stories read to him.

Some of Winton's likes at home included:

- running fast;
- climbing up his door; and,
- playing on the computer.

Some of his likes at school included:

- running;
- playing with other children and on the equipment;
- reading books; and,
- maths groups – especially playing with the tri-ominoes.

Interpretive comment about Winton - Intrapersonal characteristics

Winton was very active and stayed focused at tasks only for limited amounts of time. His preferred activities at home and school that were outdoor and involved movement. He did, however, enjoy books and being read to.

I never observed Winton's interaction with his father. His mother, though, found him difficult to discipline and he often disagreed with his older sister.

Winton was confident and happy to take risks with his learning.

Observations from home visits

Home visit on 15 May 2005

On this first visit, Winton was not interested in answering any questions until I asked him what he liked doing at home. He replied that he liked playing on the computer and he agreed to allow me to come and watch.

Winton seemed conversant with the computer and he was not afraid to press the keys. He pressed 'Delete' and left the room to find 'Arthur'. 'Arthur' was *Arthur's Thinking Games*, a CD to play on the computer, suitable for ages 3-5 years, produced by 'The Learning Co'. Winton said he wasn't supposed to put the CD in by himself so his mother came into the study and helped him to open the program. Winton was clicking the mouse. I started to talk to him and as he obviously did not want to talk to me, he turned up the volume. I tried to talk to him again so he turned up the volume even louder. Winton was focused on the screen and on what he was doing. He was not interested in anything that was happening around him and he was especially not interested in talking.

I sat quietly near the computer observing Winton and what he was doing, and taking notes. Winton, therefore, decided to turn down the volume and started talking to me. Winton said he used the computer once or twice a week. He also said that his sister *(older)* helped him sometimes but that she would rather be on the computer herself. Winton had obviously played the game before, as he knew what to do and on questioning, Winton said that he played it sometimes.

Winton appeared competent at using the mouse to move the cursor around the screen. The game involved moving an object from floor to floor of a house to finally find the way out. It involved climbing ladders and manipulating the object along hallways and around corners. Winton made these manoeuvres easily.

Winton then went into a 'Paint' program. He drew a picture. He was fascinated by one of the icons and clicked it several times. Winton was using the mouse with his right hand despite the fact that his mother had said that he was left handed. The 'Paint' program was easy to use in the beginning with large areas to paint but became more difficult, requiring greater concentration towards the completion of the game as the cursor had to be manipulated carefully to paint the last small sections of the picture.

Winton kept changing the background colour. He was focused on what he was doing, took little notice that I was observing his actions and made no comments. There were eight choices of colours and Winton tried every one of them. He then made many of the pictures with the same colour background so that the object could not be detected but with others, he mixed all the colours together. He could read the words 'STOP' and 'EXIT' and knew what the words meant and what would happen when he clicked on these words.

Winton began a new game. This game involved clicking on the animals so that they would make the appropriate noises. Clicking on different characters would take the player to a different game. Winton clicked on 'a car' at Level 1. Winton's sister joined him and sat next to him on his chair. Winton's mother said that Winton learned a lot from his sister; both on the computer and also reading and spelling. She said that he liked to do his homework when she was doing hers.

Winton's sister convinced him to go and get his 'home reader'. The book was called *The Nest* and Winton was now keen to read the book to me. He read:

> Mr and Mrs Mouse run here and there.
> They get some paper.
> They get some hair.
> They get some wool and a teddy bear.
> They make a nest for the babies there.

Winton read his home reader without any errors and was pleased with his efforts.

Winton was starting to 'warm' towards me by the end of that first visit and he was keen to know when I would be returning.

<u>Interpretive comment</u>

If Winton had not responded that he liked playing on the computer at home and if he had not agreed to demonstrate his use of the computer, I am not certain about what my next step would have been. Winton was very astute. His behaviour at the computer was a test of my responses and I believe I passed Winton's test. The real breakthrough, though, was when Winton read his home reader without any errors. He was obviously pleased with his attempt at reading and his success and, therefore, wanted to know when I would be returning.

When reading Winton knew that the print made sense, he read from left to right and used the picture cues to assist in his reading. There was no evidence with his reading of this text that he was using the sounds of the letters or sounding out to decode the words. He seemed to be either reading from memory or he actually knew the words in the text by sight.

Winton's mother had previously commented that they had not used the computer regularly because they were having problems with it, however, Winton was confident in using the computer. He knew many of the functions of the computer and could also navigate the screen with confidence.

Home visit on 28 June 2005

On this visit, Winton was happy to converse with me and we chatted about school and activities that he had been doing; however, he was still quite reticent, only answering briefly the questions asked. He agreed to complete the Technology Interview (Appendix G).

Winton said that he did not use the computer at home very often because it did not work very well. He said it was very old and it often crashed. Winton said that when he did use the computer that his mother helped him and that his sister always 'took over'.

On the computer at home, Winton:

- played games;
- typed his name; and,
- emailed to Debbie and she emailed back. His mother helped him but Winton said he could do it 'fine'.

Winton said that he did not go on the internet. He said that he couldn't print because there was no printer.

Winton said that he also played his Uncle Matt's XBox with a boat game, a racing car game and a monster game. He said he could work them 'fine'. Winton said there were special prize boxes, and a tornado sucks up all the others.

At school, Winton said that he only used the computer on Fridays in the library/computer room. He said that he never used the computer at school on other days. His class teacher helped him use the computer at school and the children:

- typed sentences;
- played with *KidPix*; and,
- used internet games like *Peacock's Number Games*.

Winton said that they didn't print anything at school.

I began some assessments with Winton.

On the Johnson Word List (Appendix H), an assessment of known 'sight words', Winton read 18 of the first 25 words by sight, sounded 1 of the words correctly and attempted to sound the other 6 words.

Winton completed the Sutherland Phonological Awareness Test. (Appendix I)
Winton's total score was 36 out of 58.

He had mastered:

A: Syllabic and subsyllabic level
  - Syllable counting
  - Identification of onset

B: Phonemic level (CVC)
  - Identification of final phoneme
  - Segmentation (1)
  - Blending (VC, CV, CVC)
  - Deletion of initial phoneme

C: Phonemic level (Blends)
  - Segmentation (2)

Winton was at the emergent level at:

A: Syllabic and subsyllabic level
  - Rhyme detection

D: Grapheme-Phoneme Correspondences
  - Non-word reading
  - Non-word spelling

Winton was not competent at:

A: Syllabic and subsyllabic level

- Rhyme production

C: Phonemic level (Blends)

- CC Blends: Delete First Phoneme
  - CC Blends: Delete Second Phoneme

Winton read about half of his home reader to me. It was a book at B1 level (Beginner Level 1) titled *The Bee*. He had 10 words correct, 1 error and self-corrected once. He wouldn't read the rest of the text.

Winton was difficult to keep on task. He was now very accepting of me in his home but he would change from activity to activity. His mother said he had always been very active and our reading session would often be interrupted by Winton going and completing another task, for example: changing his clothes, having something to eat or drink, running around the backyard, talking to his older sister or his mother.

<u>Interpretive comment</u>

Winton had not had the opportunity to print any of his work done on the computer at school or home and from his comments it was obvious that at school, the kindergarten children had computer instruction as a separate lesson and by a different teacher from his class teacher.

With his home reader, Winton easily read the first half of it but then wouldn't continue reading. He diverted his attention elsewhere. His behaviour was difficult to understand. His mother seemed resigned to the fact that he was just an active child; however, often on the computer, he could concentrate for large amounts of time, although, he was always trying to master something new. So with the reader, was he just 'sick of it' or afraid he would make a mistake or had just never been encouraged to complete a task?

His mother had also commented that he loved having storybooks read to him and wouldn't go to sleep without one. The results on his assessments were beyond the expectation for mid-way through Kindergarten. He had an extensive sight vocabulary for a young child and his results on the phonemic awareness assessment (SPAT) were also high.

Home visit on 9 August 2005

On this afternoon, Winton's mother told me that at school, Winton had gone up to Level B2 in the Home Reading Scheme. Winton started to read his home reader to me. Winton used several strategies in his reading. He used beginning sounds, picture cues, broke words into chunks and self-corrected if the words in the sentence did not 'make sense'.

He had an extensive sight vocabulary, especially for a kindergarten child. When I would ask how he could read a difficult word, for example 'high'; he would say, 'I just knew it'. I asked him how he could read 'low'. His reply was, 'It is down low'. He could read 'dear' by sight. He said it looked like 'bear' and he said he saw that word on the computer at school - In *KidPix* and games on *Google*.

Winton read a book from Level 4 of the PM Benchmark Kit titled *Little Cat is Hungry*. At this level, Winton was competent, understanding the meaning of the text and discussing the main ideas. When questioned for understanding, his answers were accurate. Winton used the picture cues to assist with his reading. When asked, 'How did you know that Little Cat was hungry?' his reply was, 'Because it's on the cover. He is trying to catch the bird and eat it'. This reading session was completed with Winton's sliding up and down his slippery dip in the backyard in between each page and lying on his back under the barbeque setting, holding the book above his head to read.

<u>Interpretive Comment</u>

As noted previously, Winton had an extensive sight vocabulary for a kindergarten child but as this home reader was a level higher than the previous one, it was more difficult to read and contained words that Winton did not know by sight. He, therefore had to use other cues to decode the words and he used many decoding strategies like sounding out, chunking sounds together, looking at the pictures and self-correcting when the reading did not make sense. Winton was very aware that what he read had to make sense.

Winton had a very good memory which also helped with his reading. He remembered words he had seen at school and was able to read similar words in his readers adjusting some of the sounds if needed eg. 'bear' when he had seen the word 'dear'.

Actually these two words are different from each other. Apart from the beginning letter, they look the same but they don't actually sound the same

Home visit on 25 August 2005

Winton only wanted to use the computer. He was not in a compliant mood and on my arrival and throughout my visit, was having disagreements with his sister, so my visit was cut short and I left after the brief session on the computer described below.

We went into the study to work on the computer. I opened a word document for Winton. He knew how to type, use the 'Backspace' key and the 'Space' bar but not 'Enter'. He knew how to use the 'Caps Lock' to change the case to capitals. I showed him how to 'Insert' and he quickly learnt how to use the 'Insert' function by himself. He happily inserted pictures onto the blank word document page but was not interested in typing in a sentence to match his picture. He asked if I could show him the functions of the other menus the next time I came, for example, 'File, Edit, View'.

<u>Interpretive Comment</u>

When Winton was not compliant, he was not the kind of child that you could 'talk round' or convince to do something else. He continued to focus on what it was that had annoyed or upset him. There was really no reason for me to stay any longer and I felt that Winton's mother was embarrassed that he was behaving in this manner. I, therefore, organised to visit at a later date.

Home visit on 9 September 2005

This was my last visit to Winton's home. When I arrived, Winton was playing with his Tamagotchi. He did not want to be disturbed, although, Winton's mother said he had had his Tamagotchi for at least a month. Winton seemed to become focused on something, and then he wouldn't comply with any requests unless he wanted to comply. This afternoon, he was focused on his Tamagotchi.

I discussed Winton's technology skills with his mother. She reported that Winton went with his father almost every weekend to the library and his father showed him how to use the computers at the library to search for information, books or magazines. Winton's father had helped Winton to type in 'Spiderman' to search for information that he wanted on Spiderman.

Winton was eventually convinced by his mother to work with me on the computer. Winton had remembered how to 'Insert' from my previous visit two weeks ago. Winton went to 'Clip Art'. He then pressed 'Cancel' and 'OK'.

I showed Winton some of the functions in the 'File' drop-down menu; 'Save', 'Save As' and 'Print'. He said he couldn't print 'because we don't have a printer'. He was not interested in the 'Edit' and 'View' drop-down menus.

Winton clicked on 'Start' on the computer, then 'Program' and 'Microsoft Word'. Winton commented that he knew the program that he wanted by the capital 'W' on the desktop.

He typed in lots of letters, any letters, pressed the 'Backspace' key and used all of the arrows. He inserted a picture, changed the letters to capitals, used the 'Backspace' key and the 'Space bar'. Winton typed in many letters all over the screen. He was being difficult to work with so we ended the session on the computer.

Winton read two books from the PM Benchmark Kit at Level 6 and 9. Even at Level 9, Winton was accurate in his reading. He read all words in the text correctly by sight, except he inserted an extra 'the' on two occasions, sounded one word, self-corrected another and reversed the order of two other words.

Winton had a good understanding of the meaning of the text. He accurately retold the main events of the story but when asked the questions to show his understanding of the text, then said he didn't know the answer to the first question but he correctly answered the next two questions.

I said goodbye to Winton and his family. I have seen Winton's mother on several occasions since that last visit and she has reported that Winton is progressing exceptionally well at school although his behaviour continues to be of concern.

Interpretive Comment

It is interesting that like Adam, Winton was using his visual skills from reading print and paper-based texts to assist him in understanding which icons to use on the computer screen. Adam had previously said that the internet was the icon with the big 'e' on it and Winton knew Microsoft Word from the capital 'W' on the screen.

Winton seemed to learn easily on the computer and he was always trialling the keys and the various functions. Winton's ability to take risks and 'have a go' meant that he would become an autonomous learner especially with technology.

Literacy learning

Assessment results (Term 3, Kindergarten)

Print and paper-based literacies

The table overleaf shows Winton's:

- knowledge of sight words (Johnson Word List, Appendix H);
- development of phonemic awareness (SPAT, Appendix I); and
- level of reading ability as measured on the PM Benchmark Kit (Appendix J).

Winton's Scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Johnson Word List	Sutherland Phonological Awareness Test (SPAT)	PM Benchmark Reading Level
18/25	36/58	9

Table 6.9 Winton's scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Technology skills

Table 6.10 demonstrates Winton's technology skills. The activities outlined have been summarised from Early Stage 1 (Kindergarten) capabilities from the NSW DET document *Computer-based Technologies in the Primary KLAs* (Appendix K).

Early Stage 1 (Kindergarten) Technology Capabilities

An Assessment of Winton's Technology Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Below	*At*	*Above*
Identifies the basic parts of computers and their functions.			✓
Uses and understands computer terms.			✓
Experiments with using the computer mouse and keyboard.			✓
Views and discusses graphics on the screen.			✓
Experiments with paint or draw software to see how it operates and the effects that can be created.			✓
Uses computer software programs to create texts.	✓		
Uses drawing software to create pictures for scribed texts.		✓	
Accesses and inserts a picture from a file.			✓
Understands how the internet can be accessed and used.			✓

Table 6.10 An assessment of Winton's technology skills

Summary: Winton

Winton's mother has always been the main carer and played a pivotal role in Winton's literacy development. His father has always had work commitments that have allowed him only small amounts of time with his family. He is often home late in the evenings and regularly on interstate or overseas trips for three weeks at a time. Information supplied by Winton's mother, though, indicated that the amount of time Winton spent with his father was 'quality' time.

> Winton was also read to by his dad and sister about three times a week at bedtime and also a couple of times a week at other times of the day.
>
> (Parent Questionnaire, March 2005)

> Winton visits the local library every weekend with his dad. Winton 'often' chooses his own books and 'sometimes' his dad helps him to choose appropriate books.
>
> (Parent Questionnaire, March 2005)

Winton's mother also indicated that Winton's elder sister helped him to read.

Winton has also regularly visited his grandparents and has stayed with them on a weekly basis; however, Winton's mother did not indicate that they read to Winton. On his weekly visits, he visited to 'have lunch' with his grandparents.

Despite Winton's reluctance to read to me, the information supplied by his mother indicated that Winton 'loved' books.

> My son has always loved being read to and has definite favourites.
>
> (Winton's mother, Parent Questionnaire, March 2005)

> My son loves to receive books as gifts. For his birthday last week he received non-fiction books which he is enjoying listening to, and looking at the pictures.
>
> (Winton's mother, Parent Questionnaire, March 2005)

> Prior to school, from a very early age, Winton had bedtime stories read to him even if it was midnight. That was his routine and he wouldn't go to sleep without his bedtime story.

(Winton's mother, Parent Focused Interview, May 2005)

Winton was exceptionally active. This was observed at all of my home visits and, in particular, the following was recorded,

> This reading session was completed with Winton's sliding up and down his slippery dip in the backyard in between each page and lying on his back under the barbeque setting, holding the book above his head to read.
>
> (Home Visit, 9 August 2005)

Winton also indicated his love of being active when he was asked what he liked doing at home and at school.

Some of Winton's likes at home included:

- running fast;
- climbing up his door; and,
- playing on the computer.

(Winton, Home Visit, 28 June 2005)

Some of his likes at school included:

- running;
- playing with other children and on the equipment;
- reading books; and,
- maths groups – especially playing with the tri-ominoes.

(Winton, Home Visit, 28 June 2005)

Winton was achieving well in his reading. He was competently reading at Level 9 on the PM Benchmark Kit in early September of the kindergarten year and he achieved this level with very little focus on the text being read.

Winton reported that 'he did not use the computer at home very often because it did not work very well, it was very old and it often crashed'. Despite Winton's limited time spent using the computer, he was competent at using many functions and several programs. His skills when compared to the capabilities outlined in the NSW

DET document *Computer-based Technologies in the Primary KLAs* (Appendix K) were above expected levels for children in kindergarten on all criteria.
Winton had further developed his computer skills at the council library where his father had taught him how to search for books at the library. He also played with his uncle's XBox and had recently been given a Tamagotchi.

Winton enjoyed using the computer and other technology devices and his comment was often 'I can do it fine'. He was more interested in finding out how to do something new, by trial and error than by being shown how to do it. He was an 'active' learner and supported in his learning by a loving and caring family.

Figure 6.9 (overleaf) provides a model of Winton's learning in his home in the first year of school. This model has resulted from parental information gathered from the initial questionnaire, focused interviews and discussions. The model has also drawn upon information collected through systematic observations, focused interviews, discussions and assessments during multiple home visits.

A Model of Winton's Journey at Home
in the First Year at School

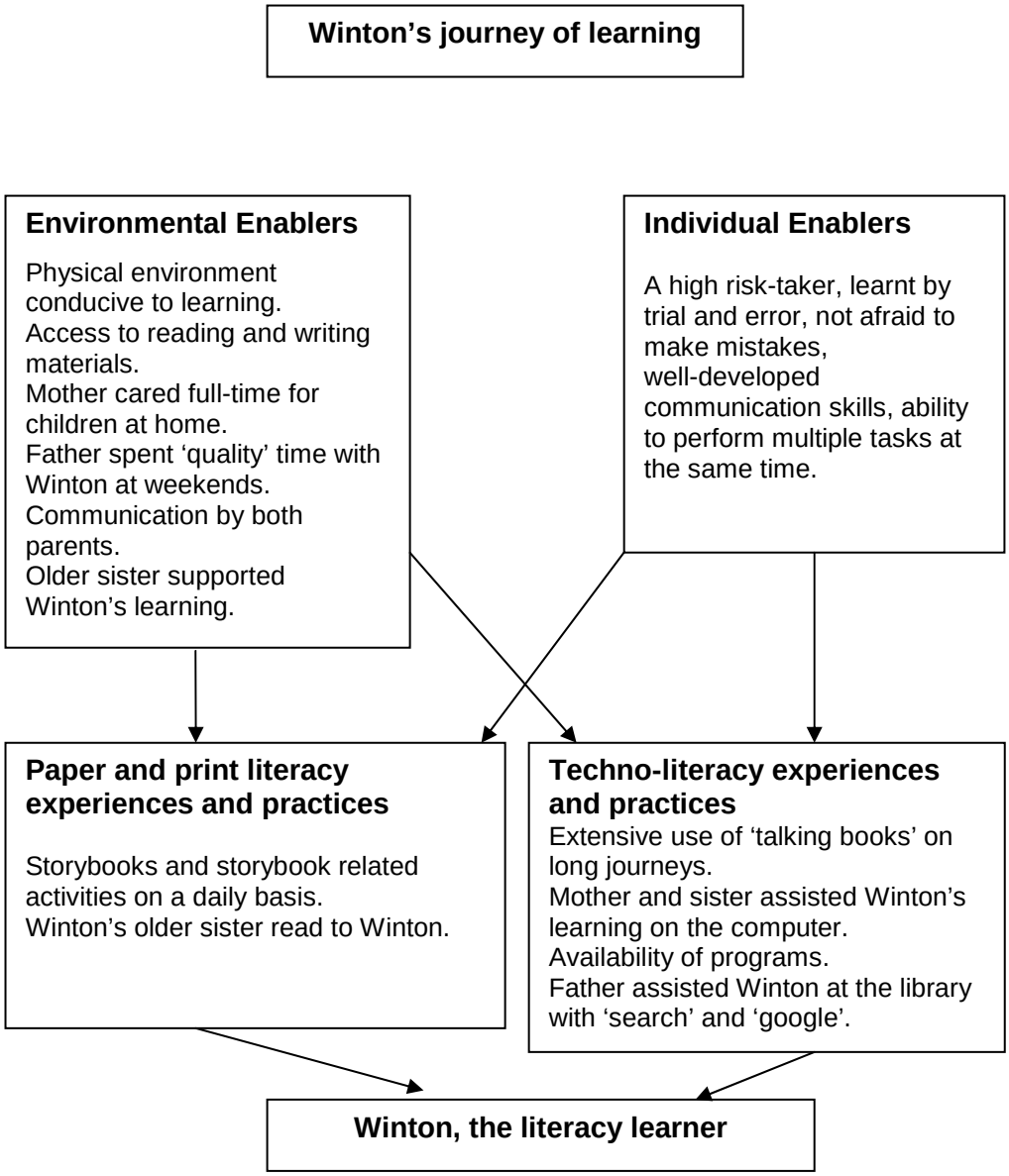

Figure 6.9 A model of Winton's learning journey at home in the first year at school

Winton's story has looked in detail at data gained from the initial questionnaire, focused interviews and discussions with Winton and his mother, and assessments and systematic observations of Winton in his home environment. In the next case study story, the journey of Jacob from School 1 will be presented.

Case Study No. 5: Jacob

Background information about Jacob

Jacob attended Kindergarten at School 1 as a student in one of three kindergarten classes. At the time of first contact with Jacob's mother in May 2005, Jacob was aged 6 years. Jacob's mother indicated that Jacob had been old enough to have commenced school in the previous year and that he was a confident child but she felt that, academically, he was not *'ready'* for school. He preferred sporting activities and did not really like to '*sit still and pay attention'.* She and her husband had, therefore, decided to hold Jacob back until the following year.

> Jacob is very confident. He was eligible to start school in 2004 but academically he was not ready. He was more interested in sport so he was kept home until 2005.
>
> (Jacob's mother, Parent Focused Interview, May 2005)

Jacob presented as an extroverted and active child. He was talkative and confident but not eager to answer specific questions asked.

Six weekly visits were made to Jacob's home for approximately an hour and a half each visit with the first visit being made while Jacob was at school. Both Jacob's mother and younger sister were present at this first visit where Jacob's background and his parents' views were discussed using the information from the initial parent questionnaire (Appendix A) and questions from the focused interview (Appendix F). This information provided a valuable backdrop to, and understanding of Jacob's development.

On subsequent visits, Jacob was observed in his home environment with print and paper-based literacies and working on the family's computer. Many topics, mainly about Jacob's learning, and activities with the family and at school were also discussed with both Jacob and his mother. Anecdotal notes were recorded and conversations were audio taped. I did not meet Jacob's father during any of the visits.

Jacob also completed a technology interview (Appendix G), and his phonemic awareness (Appendix I) and reading skills (Appendix H and J) were assessed.

On my first few visits, Jacob was happily playing outside with his friends when I arrived and was not keen to come inside to ‘do work’.

Interpretive comment about Jacob

Jacob like all the other case study children lived in a loving and supportive family. Like Winton, he did not warm to me at the first visit; but unlike Winton, he was talkative and confident in my presence but just not eager about allowing me *‘into his world’.* Answers to any questions would have to wait until we developed a closer relationship.

As Jacob’s parents had kept him at home the previous year, Jacob was 5 to 10 months older than the other case study children.

Environmental factors

The home

Jacob lived with his mother and father, and younger sister in a new home in a quiet suburban street. The block of land had been subdivided and Jacob’s maternal grandparents lived in a house at the back of the same block of land.

Jacob had also lived in Hong Kong with his parents from two months of age until he was four years old. His parents were living at this same residence when he was born and returned to this residence on their return from Hong Kong. In Hong Kong, Jacob and his family lived in a small apartment.

Jacob’s family home was built as an ‘*open plan’.* The front entrance to the home was through a courtyard and outdoor entertainment area that led to a staircase and balcony above. The main living area at the front of the house included the kitchen, dining room, lounge and family rooms. Bedrooms, bathrooms and the laundry were adjacent to, and separate from this main living area.

Jacob’s bedroom was on the first floor and as it was a large room, it was also used as the home office and had a computer, printer and shelving along one wall. Jacob’s room was accessed by a steep set of open stairs at the end of the downstairs family

room. Jacob's room was open to the family room below as there was no wall along that side. Jacob had many toys and books in his room as well as a '*chalkboard wall'* where he could write and draw.

Jacob and his sister also had toys and reading and writing implements in the family room and the family room also housed the family's television, sound equipment and a bookshelf.

The back yard was small and neat and led to Jacob's grandparents' house at the rear of the block.

Interpretive comment about Jacob's environmental factors – The home

Unlike all of the other case study children, Jacob had spent almost four of his preschool years living overseas in Hong Kong where his parents rented a small apartment. His early years also involved several trips back home with his mother.

In Sydney, Jacob's maternal grandparents lived in their own home at the back of the block of land where Jacob and his family lived. This meant that Jacob had regular contact with his grandparents.

The home had easy access in and out at both the front and the back; however, at the front there was only a small courtyard and this was not play-centred. Outdoor play was only available at the back of Jacob's home between his house and his grandparents' house. The open plan of the house itself, and especially the openness of Jacob's bedroom induced family unity as the children were visible in most areas of the home. Jacob's bedroom was organised in such a way that learning through play was very accessible. Having the computer in Jacob's bedroom meant that it was also easily accessed.

The people

Jacob's mother was an accountant who now, with young children, job shares, and she loves her work. She does not view herself as maternal or as being a '*good'* parent. Jacob's mother said her goal as a mother, was to be like her sister who was an early childhood director but now, as a mother of four children, was on a preschool board. Jacob's mother is very close to her sister, having stayed with her for extended

periods on her trips back to Australia during the four years when she lived in Hong Kong. Jacob's mother loved to read but now with the family finds little time to read.

Jacob's father is very musical, playing the clarinet and teaching himself to play the saxophone. He reads several magazines but not many newspapers and reads books only on holidays. Jacob spends a large amount of time with his father at the weekends since returning to Australia, and also spent time with his father when the family lived in Hong Kong. His father reads to him at night just as often as his mother does. Jacob's parents have always wanted only the best for Jacob. His father introduced him to music early and both parents have always participated in many activities with Jacob.

Jacob's mother's biggest fear is that as one of the eldest children in Kindergarten at school, Jacob may have the potential to be a bully. She thinks that he is a bit of a *'rascal'* at school. She also worries about his being easily distracted as being inside all day is too much for him. Jacob's mother commented that she is not really sure about how Jacob is performing at school in reading and writing.

Jacob's mother doesn't think that there is a choice about being proficient with technology, and she doesn't think that there is enough time given to learn technology, at home or school.

> We strongly believe that technology plays a major part of our lives today and that kids who learn early will be comfortable with technology at school and work.
>
> (Parent Questionnaire, March 2005)

Jacob has a younger sister who was born when he was approximately two years of age. Jacob came back to Australia with his mother for his sister's birth. Jacob's mother's sister had often cared for her nieces and nephews including Jacob and his younger sister. When Jacob came back to Australia from Hong Kong for his sister's birth, he stayed with his aunt and uncle and their four young children. He had several trips back to Australia during the family's time in Hong Kong. Jacob also has frequent contact with his four grandparents and one great grandparent.

When Jacob was four months of age, his mother went back to work two days each week and had a helper in the home five days a week. The helper was a Philipino

woman, about 40 years of age who had worked in other people's homes for most of her working life. She did not '*live in'.*

Prior to attending the International School in Hong Kong at the age of three and a half, Jacob was cared for two days a week by a lady in her own home. She also cared for five other children. Jacob's parents felt that Jacob's social development would benefit from his being cared for in a home with other children of a similar age.

Interpretive comment about Jacob's environmental factors – The people

Jacob's early years were influenced by a range of people in both Hong Kong and Australia. The following table clarifies Jacob's care prior to attending school.

Jacob's Care Prior to School

Age	*Change to Jacob's life*	*Home experience*	*Caregiver*
Birth		At home in Australia	Parents
2 months	Family flew to Hong Kong	Small apartment in Hong Kong	Parents
4 months	Mother returned to work two days each week	Small apartment in Hong Kong	Philippino woman cared for Jacob in the home five days each week
2 years	Return to Australia for sister's birth	Living with mother at auntie's and her four young children in Australia	Mother and aunt
2 ½ years	Two days each week went to carer's home	Carer's home	Carer cared for five other children as well as Jacob
3 ½ years	Attended International School in Hong Kong	Living in small apartment in Hong Kong	Parents after school
4 years	Attended preschool in Australia	Living in family home in Australia	Parents after preschool

Table 6.11 Jacob's care prior to school

It is clear that many adults impacted on Jacob's early development and with his mother's admission that she did not see herself as either '*maternal'* or *'a good mother',* Jacob's father and other carers fulfilled a large part of the role of caring for Jacob. Despite Jacob's mother's feelings of inadequacy, she also admitted that she and her husband wanted the '*best for Jacob'* and it was probable that she learnt how to be '*a good mother'* from her sister. Her sister had training and experience in her role as an early childhood educator and Jacob's mother held her in high esteem. Both of Jacob's parents valued highly the role of technology in education expressing an understanding of the need to be conversant with technology for future employment. Jacob had also had early experiences with music.

As well as Jacob's interaction in the early years with a wide variety of adults, he also had daily contact with young children while living at his auntie's house, and when cared for in the carer's home with five other young children. He was also very close to his grandparents, especially his maternal grandparents as they actually resided at the same address.

Jacob presented as an active child but his mother's fears about his being a '*bully'* at school may have been unfounded. Observations of Jacob with his younger sister suggested that he had a caring nature at least with children younger than himself.

Early learning experiences

Both Jacob's mother and father have always read to Jacob from about three months of age, with his father reading to him as often as his mother and in total, Jacob is read to about five nights a week and about once a week at other times of the day. No other members of the extended family have read to Jacob. Jacob's mother indicated that they *'sometimes'* discuss or name the pictures in the books and talk about the meanings of words while reading.

Jacob '*sometimes'* asks for favourite books to be read, and memorises books read to him but '*seldom'* asks to be read to and *'never'* reads to himself or others. Some of Jacob's favourite books include *Franklin Books*, *The Children's Bible* and *Where's Wally.* His mother said that Jacob can relate to the activities that Franklin did like '*sleepover'*, the '*bike helmet'* and '*camping'.*

Jacob's parents '*seldom'* take him to the library and when they do Jacob *'sometimes'* chooses his own books and his parents *'sometimes'* choose appropriate books for him. Jacob has his own library of more than 200 books of various titles including Dr Seuss books, Australian writers, Bibles and other children's books. These books have been either gifts or purchased by Jacob's parents. Jacob *'often'* receives books as gifts.

Jacob *'often'* reads instructions for games, videos, building equipment and other toys especially his XBox and instructions for building lego. He '*sometimes'* uses a computer, involving reading and reads signs in the wider community. Jacob *'seldom'* reads other reading material eg. comics, magazines, TV programs, advertisements etc.

In a typical week, Jacob *'often'* writes the letters of the alphabet or words and *'sometimes'* writes his own name but only '*seldom'* writes others' names or writes pretend letters to others. He *'never'* writes about events or possessions or does word processing on the computer. Writing materials have always been available in the home since Jacob was about two years of age and he started scribbling and drawing from this age. From five years of age, Jacob has looked for things to copy eg. cereal packets, packaging of games.

In a typical week, Jacob's mother *'sometimes'* teaches Jacob to read and write words. She said that there was an alphabet poster in the family room that *'we go over occasionally'.*

In the home there were five phones, including mobile phones, two TVs and DVD players and one CD/tape player, one computer, one digital camera and one video camera. One of the TVs and DVD players was primarily used by the children.

Jacob '*often'* plays both portable game machines and TV game machines and *'sometimes'* uses programs on the computer, the internet and multimedia CD-ROMs. He *'seldom'* receives or writes emails or used talking books on CD or tape. The family has received emails from a friend overseas.

From Jacob's birth, his mother reported that there has always been a computer in the home. Jacob has been playing computer games since he was two years of age. He listens to stories on disc and he loves clicking on the animated pictures because they

‘*do things’.* He played frequently with technology prior to his younger sister becoming mobile; that was until he was about three years of age.

He has about three or four phonics CDs but his mother said he is not very interested in them. His attention span is not very good. He has a GameBoy that he received last Christmas but he doesn’t play it for long. He prefers gross motor activities and playing outside or tinkering with tools. He also now has an XBox but wouldn’t think to play with it on his own. He may play for an hour with a friend.

Jacob does not use email, although his parents when they were in Hong Kong, emailed Jacob’s grandparents. From four years of age, he has been on the internet. He learnt the upper case letters from the keyboard. Jacob’s father has made videos at home and Jacob has watched the process and has been with his father while videoing footage in a light plane.

While living in Hong Kong, Jacob went to the International School at three and a half years of age, for a half a day, five days a week. ‘Jolly Phonics’ was a universal part of teaching at the International School. After returning from Hong Kong, Jacob attended preschool three days a week prior to starting school.

While in Hong Kong, Jacob:

- was exposed to a large number of books that were bought on trips back to Australia;
- watched many videos from Australia eg. Playschool, Wiggles;
- attended church and Sunday school; and,
- played in the park, and on his bike in play areas.

When Jacob is not at school he:

- goes to soccer training, and plays soccer games at the weekends;
- attends church activities and Sunday school;
- goes to movies about five times a year;
- plays with all the children who live close by;
- visits his grandparents who live at the back of the block; and,
- goes on family outings and picnics.

The family has been very involved in church activities, attending church on a weekly basis and attending most of their activities, so socially, Jacob has mixed with a large number of people, both adults and children, throughout his life. The family often goes on picnics and has frequent family lunches.

Interpretive comment about Jacob's environmental factors – Early learning experiences

Jacob's father was involved with Jacob's early literacy learning on a daily basis, reading storybooks to him as often as Jacob's mother. Despite both parents displaying an interest in reading to Jacob, he did not frequently initiate reading experiences. Jacob did not often visit the local library but had a collection of books in his own home library. Jacob was not read to as widely as other children at his school, School 1 as survey findings indicated these children were read 11.05 books on average each week whereas Jacob was read about 7 books each week. Jacob was not one of 28% of students at School 1 who frequently visited the local library each week. He did, however, own at least twice as many books in his own home library compared to the other School 1 students.

Other reading activities were fairly comparable with children at School 1, except Jacob read instructions for games, videos, building equipment and other toys far more than other children at School 1 and he read signs in the community far less often. Writing activities were fairly comparable although Jacob wrote his own name less frequently than the other children at the same school.

Like other children at School 1, Jacob's family owned most technology devices. With the computer, though, Jacob has had access to, and been conversant with its use from about two years of age. He has used computer programs far more often than children at School 1 and with only 8% of children regularly using the internet at School 1, Jacob has frequently used the internet since he was four years of age. His mother commented that Jacob learnt the upper case letters from the keyboard. Jacob like other children at School 1 did not use email but he was conversant with its use as his parents used email while in Hong Kong.

The child

Intrapersonal characteristics

Jacob presented as a happy, extroverted, confident and active child. He was apprehensive at our first meeting to display his reading and writing skills but eager to display his knowledge on the computer.

Jacob's mother reported that he reached all childhood milestones at an early age – crawling, standing and walking, well before the average age. He moved quickly around the room and the house, darting at a fast speed from one activity to another.

Jacob was a good listener and focused, when interested. He was highly motivated to learn new technology skills. He was quick to learn '*new things'* and was a risk-taker, at least on the computer. He would trial new computer knowledge over and over again, testing the functions of the keys to their limits, laughing loudly. He had no fear of making mistakes or '*doing the wrong thing'.*

Jacob used the functions on the computer at the same fast speed that he did everything. Jacob displayed enjoyment of his knowledge and skills and was proud of his efforts and his learning. He transferred known knowledge to new situations, asked questions and had a good memory.

Jacob communicated well. He was always very eager to talk with me.

Jacob also had an enthusiastic nature and on various visits, the following events were entered in the anecdotal records.

> Jacob was very keen, even on this first meeting to work with me on the computer.
>
> (Home Visit, 10 May 2005)

> When I arrived on this afternoon, Jacob was very excited about being promoted at school to Level E2 on his 'home readers' and he very happily read the book to me.
>
> (Home Visit, 21 May 2005)

> Jacob was his usual very active and enthusiastic self, keen to work on the computer with me from the minute that I arrived.
>
> (Home Visit, 28 May 2005)

> Jacob was very happy to participate in the afternoon's session. He was compliant and very keen to do lots of reading.
>
> (Home Visit, 4 August 2005)

> When I arrived, Jacob wanted to read several books from the PM Benchmark Kit. He said he could read as high as the kit went and he certainly wanted to try.
>
> (Home Visit, 18 August 2005)

Some of Jacob's likes at home included:

- playing at his friend's house;
- playing the XBox – it was Jacob's and his dad's;
- playing on his own;
- playing races with his dad;
- playing on the computer – music, games, internet and printing (no email);
- only reading one book – there is only one book he can read (*That's Not My Dog*); and,
- only sometimes playing with his little sister.

Some of his likes at school included:

- playing handball;
- colouring pictures;
- doing maths groups – his mum helps; and,
- playing with his friends.

Interpretive comment about Jacob – Intrapersonal characteristics

Jacob had a warm and cheerful personality with an infectious laugh and desire to learn. Home visits were always enjoyable and his enthusiasm for learning was exceptional. Jacob was that little bit older than the other case study children and his

maturity added to his confidence. He was highly motivated and exceptionally capable. His confidence in risk-taking only added to his high ability.
For his age, he was very conversant with the computer, displaying an understanding of its functions and an ability to immediately understand and enjoy new knowledge.

Jacob was also a good communicator. He enjoyed a wide variety of activities both at home and school; many of which involved active play.

Observations from home visits

Home visit on 10 May 2005

Jacob seemed a little apprehensive at this first meeting. He would answer questions asked but often had to be probed for information. He named four boys as being his best friends but said he didn't know if he liked school. He reported he was a good reader but on this occasion did not want to read.

Jacob had brought home a reader from school; his mum had it in the reading bag and Jacob went off to find some words from school that had been written on separate pieces of cardboard. He looked at the home reader his mum had found in his school bag and said he didn't know the name of the book but could read the words in the book. He said he had read it at home before and that his mother had helped him. He pointed to words in the text saying *'my, see'.* He was accurate with individual words. Jacob knew to look at the pictures to help him read the words. He made errors on some of the words eg. *'it's'* for *'that's'*. He put his book back in his bag.

Jacob was keen, even on this first meeting to work with me on the computer. He said he always had to ask his mum before using it. The computer was a new flat screen and was used by Jacob and his mother and father. It was set up with a printer in the room above the family room that also doubled as Jacob's bedroom. The room was large and Jacob's bed was over against the opposite wall to the computer.

Jacob's mother turned on the computer, logged on to the internet and typed in *'Lilo and Stitch'* on the screen. Jacob was keen to assist and used the mouse competently. According to Jacob, '*Lilo and Stitch'* was a '*chasing game'* and *'you have to try not to let the icon catch you'.*

Jacob mostly used the correct terminology. He concentrated well and sucking his lip paid full attention to the screen. He used all of the arrow keys with competence, trying to stop the icon from catching him. Jacob recognised the word *'start'.*

I asked Jacob how he knew what the arrow keys did. He said,

> I found it out by myself. I just try and then I see what it does. I don't know what some keys do because I haven't tried them. I find out all things like that.

Some more of Jacob's conversation includes,

> I can't read any of the words. I have just found out where to put the cursor. I know to click on 'continue' because I have done it before. I have played 'Sandwich Stacker Game' and just a few other websites. I know the back arrow – daddy showed me on the other computer. I know this other arrow goes to the next page. I just do them and work them out.
>
> (Jacob, Home Visit, 10 May 2005)

Jacob's learning was mostly trial and error, as displayed by his comment, *'I just do them and work them out.'* Jacob said he had been using the computer for a couple of years '*but not often last week'.* He also said if he clicked on the orange button at the top of the screen then he could make it go away. He knew how to quit *'Safari'* but said he couldn't read the word.

<u>Interpretive comment</u>

From my first meeting with Jacob, it was evident that I was not going to be readily accepted into his *'world'* and that it was going to take some time to build rapport with him. This attitude did change, though, once we started working on the computer.

Right from that first session with Jacob, it was obvious that he was confident in using the computer, was happy to take risks and was not afraid of making mistakes. His computer knowledge was extensive and the fact that he took risks and '*had a go'* meant that he was learning something new almost every time he used the computer. Jacob never displayed that he thought he could *'break'* the computer; for him, he just tried everything and that way he found how all the functions worked. Jacob's parents had introduced Jacob to the computer at a very young age and had ensured it was

always accessible. And, as Casey (2000b, p4) reports, Jacob's parents provided a risk-free environment in which to learn:

> Generally, parents provide the same risk-free environment for computer learning that they provide for language learning, that is, excitement about and praise for the child's curiosity, attempts, and success. Children are as fearless exploring the keyboard as they are exploring other parts of the exciting parts of their environment. Because no one has told them they cannot succeed, young children are much more willing to use and experiment with the new technology than are adult learners who, after years of failure, are reluctant to risk failure.

Jacob consistently commented that on the computer 'he has a go and then just works it out'. Jacob was also competent reading his home reader and knew to use picture cues to help him read the words.

Home visit on 21 May 2005

When I arrived on this afternoon, Jacob was excited about being promoted at school to Level E2 on his '*home readers'* and he happily read his book to me. He was competent at this level, self-correcting the few errors that he made. He could retell the story showing understanding of the text read.

I asked Jacob questions from the Focused Technology Interview (Appendix G).

Jacob said that he used the computer at home on some days and that no-one really helped him except his dad did sometimes and his mum '*gets me'* on the internet. On the computer at home, Jacob said he plays music that his dad downloaded, plays games, plays on the internet and prints things. He said he could '*get on'* the printer but didn't know how to print by himself.

He also plays with the PlayStation that the older children have next door. Jacob said,

> They are big kids. One is eight years old and one is eleven years old.
>
> (Home Visit, 21 May 2005)

Jacob said he sometimes uses the computer at school, but not every day. He uses it in the library at lunch times and other times *'with the class teacher and my library*

teacher'. These teachers show the children what to do but they hadn't printed anything yet.

> The kids in Kindergarten have KidPix and the other kids do something else.
>
> (Home Visit, 21 May 2005)

I began some assessments with Jacob. On the Johnson Word List (Appendix H), an assessment of known '*sight words',* Jacob read 8 of the first 25 words by sight, sounded 4 of the words correctly, made errors on 3 other words and said he didn't know the rest of the words.

Jacob completed the Sutherland Phonological Awareness Test – SPAT (Appendix I). Jacob's total score was 21 out of 58.

He had mastered:

A: Syllabic and subsyllabic level

- Syllable counting
- Identification of onset

B: Phonemic level (CVC)

- Identification of final phoneme
- Blending (VC, CV, CVC)

Jacob was not competent at:

A: Syllabic and subsyllabic level

- Rhyme detection
- Rhyme production

B: Phonemic level (CVC)

- Segmentation (1)
- Deletion of initial phoneme

C: Phonemic level (Blends)

- Segmentation (2)
- CC Blends: Delete First Phoneme
- CC Blends: Delete Second Phoneme

D: Grapheme-Phoneme Correspondences

- Non-word reading
- Non-word spelling

Interpretive comment

Considering the fact that Jacob had previously not been very interested in reading to me, he was very excited about his new '*home reader'* and couldn't wait to read it. He was also very proud of himself.

Jacob enjoyed the computer, and the fact that he used the computer by choice in the library during lunchtimes at school is interesting, especially when he also enjoys active play. It is also interesting to note that Jacob experiences a far wider variety of activities on the computer at home compared to at school. From his comment, it seems that the kindergarten children do not have any choices and only use *KidPix*.

Jacob's results on the assessments were at the expected level for a child in Kindergarten mid-way through the year. However, compared to the other case study children, Jacob's scores were higher than Alexandra's but lower than the other three children on the Johnson Word List and SPAT. He was, though, reading at a higher level than both Alexandra and Adam. Jacob's technology literacies were certainly far higher than his print and paper-based literacies.

Home visit on 28 May 2005

Jacob was his usual very active and enthusiastic self, keen to work on the computer with me from the minute that I arrived. We climbed the steps to the room above where the computer was set up. Jacob's mother came and typed in '*Ninja Turtle Game'* in '*Search'* on the Google site. Jacob clicked on '*play game'*.

Jacob was playing the game, not looking at any of the words. He pressed the space bar and also the arrow keys. He clicked on the mouse to replay the game. He submitted his score and then viewed all scores. Jacob clicked on '*everything and anything'* just to see what happened. He ran the cursor over all the icons on the screen. He clicked on the bar that said, '*Please enter a name'*. He clicked on the red button to exit from the program. He knew that clicking on buttons *'did something'*. He said he learned from watching his parents using the keys.

He logged on again and saw the word *'GO'* on the screen. He said *'GO is one of my sight words'.* He was pressing the arrows to see which way the program went. He went into a paint program. He moved the cursor over the picture to show the colours.

The colour then disappeared and he had to remember which colour it was, to re-paint the model. He played with this paint program for about ten minutes.

He went into *4KidsonTV*. He moved the cursor over the palette and clicked on colours and sections of the picture. He clicked everywhere on objects to change colours. He clicked on the red button to close down the program and clicked on *'log out'.* He pressed '*return'.* I asked what the word said. His reply was *'it goes into what you want – you press the one that starts with the r'*. He read his first and last name and his father's first and last name on the folders on the screen and also '*sleep', 'restart'* and '*shut down'.*

Jacob then quickly moved from the computer to show me his homework book. He was sounding out the words and pointing at the letters. In some words he had written capitals inside the word eg. *raBBit.*

Interpretive comment

Jacob was at ease using the computer; he was not afraid of making mistakes or deleting programs or of breaking any part of the computer keyboard or screen. His sight word vocabulary '*on the screen'* was extensive. It was, therefore, interesting that his sight word assessment on the Johnson Word List was lower than three of the other case study children. His score of 8/25 was acceptable but was certainly not high, considering his knowledge of computer or screen sight words was extensive. He was not sounding out these words on the computer, there were no picture cues; he had automatic recall of these words that he had obviously seen many times and through using the function understood the meaning of the word prior to being able to actually read it.

Jacob enjoyed using the computer and his high use of the computer was improving his literacy learning.

Home visit on 4 August 2005

On this visit, Jacob's little sister was away; not that she distracted Jacob or interfered with our sessions.

Jacob was happy to participate in the afternoon's session. He was compliant and keen to read. He read Level 2 and 3 from the PM Benchmark Kit. He was reading competently at these levels and understood what he read.

We talked about using the computers at school. Jacob said they use *KidPix* and play fun games. Jacob was keen to learn new skills on the computer so we climbed the stairs up to the computer in Jacob's bedroom.

I showed Jacob how to type the letters, change the font size, change the lower case letters to capitals, return to a new line using *'Enter'*, use the spacebar, highlight and delete and how to insert a picture from a file. He already knew how to move the blue bar at the right hand side to move the document on the screen up and down. Jacob was so excited about his new learning and wanted to experiment with everything that he had learnt. He listened attentively and learnt quickly.

He typed in capitals '*JACOB IS A GOOD PAINTER.'* and inserted a picture to match the text. He printed it out on the printer. He then typed once again in capitals '*JACOB (last name) IS A GOOD READER.'* and inserted a picture of himself as an astronaut. He had knowledge that the picture should match the text because he then said, '*Astronauts are very good readers'.*

Jacob's Writing on the Computer and the Inserting of an Astronaut

Please see print copy for Figure 6.10

Figure 6.10 Jacob's writing on the computer and the inserting of an astronaut

Interpretive comment

Jacob quickly learnt new skills on the computer. He was never afraid to make a mistake and thought it was fun. He could navigate around the screen with ease and kept repeating a new skill over and over again. When I showed him how to make a document larger, he laughed contagiously out loud and made every document as large as he could and then made it smaller again. Jacob's potential for learning was exceptionally high.

Jacob was mischievous in his learning. When he inserted the astronaut with his sentence about being a good reader, he knew that writing always matched the picture and so he had his answer ready about astronauts being good readers. He was so proud about learning how to insert the picture that he had to print his work twice because he wanted to take a copy to school for '*show and tell'* and I had asked if I could also have a copy.

Jacob's mother had commented that Jacob had learnt the capital letters from using the computer at an early age, and knowing the letters on the keyboard assisted Jacob in his use of the computer. Kindergarten children's use of the computer for writing is usually restricted because they do not recognise either lower or upper-case letters.

Home visit on 18 August 2005

This was my last visit to Jacob's home. When I arrived, Jacob wanted to read many of the books from the PM Benchmark Kit. He said he could read as high as the kit went and he certainly wanted to try.

He read Levels 4, 5 and 6 and then wanted to jump to Level 8. At all of these levels, Jacob was reading competently, self-correcting when the reading did not make sense, using the pictures and his graphological and phonological knowledge to decode unknown words. In the analysis of the retelling of the text, Jacob demonstrated understanding of the meaning and could isolate the main ideas. Jacob also demonstrated understanding of the text from his answers to the questions.

Jacob then wanted to demonstrate his skills on the computer. As we climbed the steps to the computer, he talked about all of the new techniques I had shown him on the previous visit. He opened the word document, saying '*go,go,go'*. He typed madly on the letters, writing nothing at all but filling the page with letters. Jacob then made the letters bigger and bigger. He then went back, highlighted all of the text and deleted it. He pressed the space bar. He then pressed the '*Caps Lock'* key and typed in more letters, all in capitals. Once again he highlighted all of the letters and deleted them.

Jacob's excitement about his learning was infectious. He was confident in trialling new skills and taking risks to explore the functions of the keys on the keyboard. His

self-esteem about himself as a literacy learner, about learning new technology skills and about learning as a whole, was high.

Interpretive comment

I felt sad to leave that day. The young boy that had been apprehensive at our first meeting and who had not been keen to read to me or answer any of my questions had over the weeks become excited about my visits and about his learning and was eager to demonstrate his knowledge and skills.

Literacy learning

Assessment results (Term 3, Kindergarten)

Print and paper-based literacies

Table 6.12 shows Jacob's:

- knowledge of sight words (Johnson Word List, Appendix H);
- development of phonemic awareness (SPAT, Appendix I); and
- level of reading ability as measured on the PM Benchmark Kit (Appendix J).

Jacob's Scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Johnson Word List	Sutherland Phonological Awareness Test (SPAT)	PM Benchmark Reading Level
8/25	21/58	8

Table 6.12 Jacob's scores on the Johnson Word List, Sutherland Phonological Awareness Test (SPAT) and PM Benchmark Reading Level

Technology skills

The following table demonstrates Jacob's technology skills. The activities outlined have been summarised from Early Stage 1 (Kindergarten) capabilities from the NSW DET document *Computer-based Technologies in the Primary KLAs* (Appendix K).

As shown in Table 6.13, Jacob had advanced technology skills for a kindergarten child. Jacob had been introduced by his parents to computers at an early age and displayed risk-taking behaviours when using the computer.

Early Stage 1 (Kindergarten) Technology Capabilities

An Assessment of Jacob's Technology Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Below	*At*	*Above*
Identifies the basic parts of computers and their functions.			✓
Uses and understands computer terms.			✓
Experiments with using the computer mouse and keyboard.			✓
Views and discusses graphics on the screen.			✓
Experiments with paint or draw software to see how it operates and the effects that can be created.			✓
Uses computer software programs to create texts.	✓		
Uses drawing software to create pictures for scribed texts.	✓		
Accesses and inserts a picture from a file.			✓
Understands how the internet can be accessed and used.			✓

Table 6.13 An assessment of Jacob's technology skills

Summary: Jacob

Jacob was always an active child, having reached childhood milestones early. He lived in Hong Kong with his parents for most of his preschool years and his mother and father had kept him home from school until he was older because, as he preferred to play outside, they did not think he would settle in easily at school.

In Hong Kong, the family lived in a small apartment so, therefore, Jacob's parents would often take Jacob to parks and play areas to play and ride his bike. Both his mother and father spent a lot of time with Jacob and as they were separated from

extended family members, the three of them did many activities together. Jacob's father introduced Jacob to music when he was very young. His mother and father took Jacob to movies about five times a year and Jacob watched many videos (mainly Playschool and the Wiggles) that had been brought back from Australia.

Jacob's father frequently spent time with Jacob on weekends since the family had returned to Australia and Jacob's mother expressed that she and her husband wanted only the very best for Jacob.

Jacob's parents both read to Jacob but not every day. His father read as often to Jacob as his mother did. When reading to Jacob, his mother and father sometimes participated in a few reading activities including discussing the pictures and talking about the meanings of words.

Jacob's parents had introduced him to the computer at around two years of age and Jacob played with games on the computer from this time. His parents believed that technology played an important role in our lives.

> We strongly believe that technology plays a major part of our lives today and that kids who learn early will be comfortable with technology at school and work.
>
> (Parent Questionnaire, March 2005)

Jacob was achieving well in literacy. With print and paper-based literacies, he was competently reading at Level 8 on the PM Benchmark Kit in August of the kindergarten year, could recognise 8 words by sight on the Johnson Word List and in phonemic awareness had scored 21 out of the possible 58 on the SPAT.

On the computer, Jacob knew the functions of many of the keys and could competently use several programs. He had been using the computer at home for several years and he also played on the PlayStation with the children next door and played with his XBox. Jacob had flown with his father in a light plane while his father was videoing and he had watched his father process and make the video at home.

Jacob is one of the current generation of young learners as described by Wild (2000, p148) who is,

developing in a world infused with media and digital materials; a world where distinctions between television, computers, films and books are fast becoming blurred; and where all experiences are multi- rather than mono-media.

Figure 6.11 (overleaf) provides a model of Jacob's learning in his home in the first year of school. This model has resulted from parental information gathered from the initial questionnaire, focused interviews and discussions. The model has also drawn upon information collected through systematic observations, focused interviews, discussions and assessments during multiple home visits.

A Model of Jacob's Journey of Learning at Home in the First Year at School

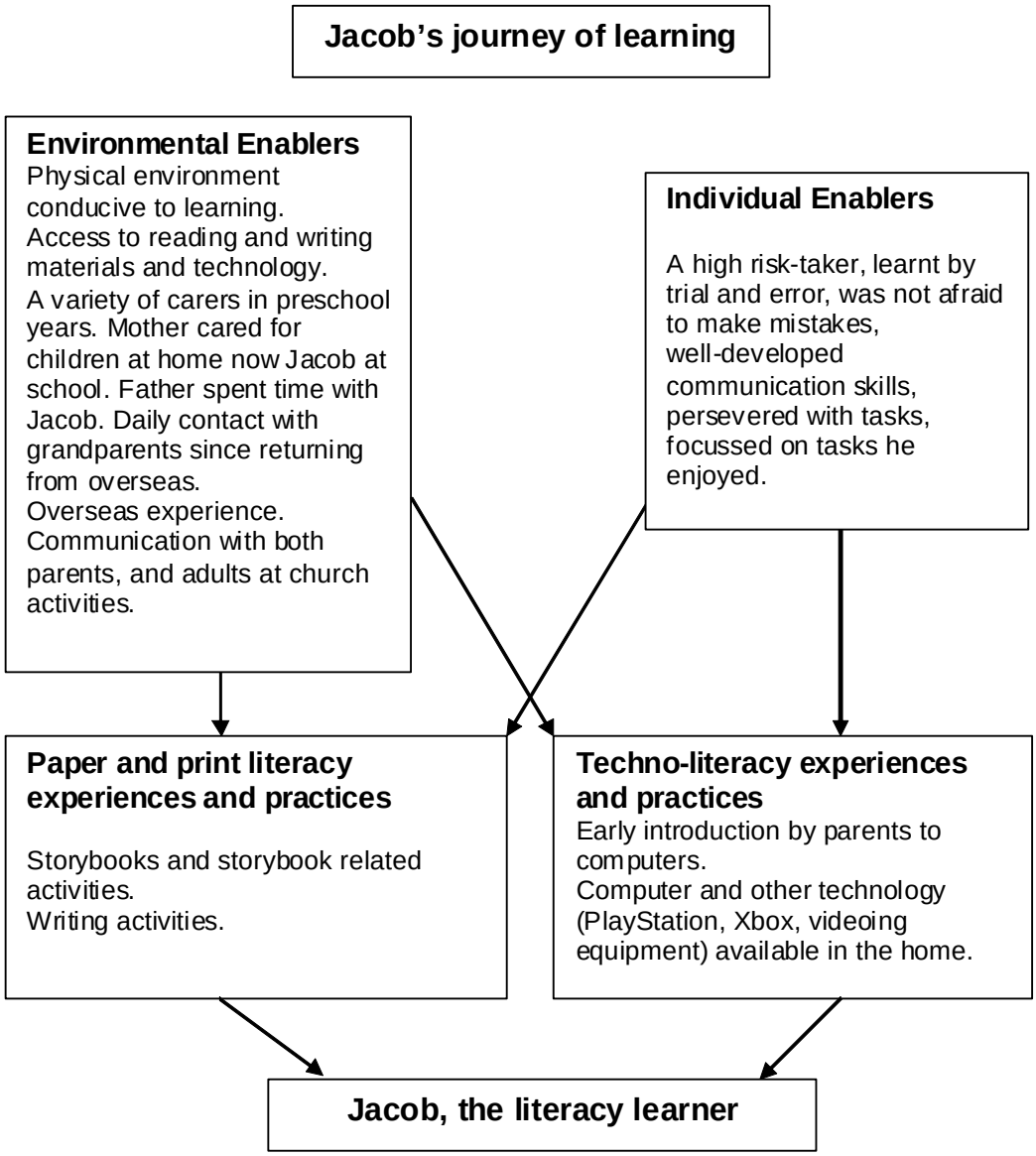

Figure 6.11 A model of Jacob's learning journey at home in the first year at school

Jacob's story has described in detail data gained from the initial questionnaire, focused interviews and discussions with Jacob and his mother, and assessments and systematic observations of Jacob in his home environment. In the next chapter, the five case study stories of Alice, Adam, Alexandra, Winton and Jacob will be discussed in light of the research questions.

Chapter Seven

The Stories Merged

Chapter Seven

The Stories Merged

Aims of the Study

This study set out to explore the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools. It aimed to answer the following two key research questions:

- What are the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools?
- How do the multiliterate practices and skills of these kindergarten children relate to the expectations, in the first year at school, of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET)?

In exploring the two research questions above, three separate research phases were implemented:

- Initial Phase: Survey using written questionnaires
- Immersion Phase: Case Studies using interviews, observations and assessments
- Mapping Phase: An analysis of relevant documents.

In the Initial Phase, data were gathered through surveying parents of kindergarten children at three Sydney metropolitan schools about their children's multiliterate practices at home. The data from this phase established multiliterate trends in relation to socioeconomic background and gender and provided a backdrop for the immersion phase.

In the Immersion Phase, case study data from the five case study children provided detailed information about the multiliterate practices of the kindergarten children in their homes.

In the Mapping Phase, current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET) related to the first year at school was analysed.

In this chapter, data from both the initial and immersion phases inform: the relationship between the kindergarten children's practices and skills; and, the expectations of policy and curriculum in the first year at school. This first section will now discuss the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools.

Multiliterate Practices in the Homes of Kindergarten Children at Three Sydney Metropolitan Schools

Introduction

Many researchers argue that literacy learning develops from birth and is supported in the home or community environment in the years prior-to-school entry (Bourdieu 1977 & 1991; Cairney 1995; Cairney & Munsie 1992; Gee 1990; Heath 1983; Luke 1993; McLane & McNamee 1990; Reid & Comber 2002; Welch & Freebody 1993).

Analysis of the survey and multiple case study data provided a wealth of information in relation to the multiliterate practices of kindergarten children in their homes. These findings augment previous research about the important role of the home environment in early literacy learning (Beilharz 1999; Burgess 1997; Heath 1983; Hill et al. 1998; Lee & Burkam 2002; Makin 1999; Mullis et al. 2003; Purcell-Gates 2000; Roskos & Neuman 2002; Snow 1983; Spreadbury 1994; Taylor 1981, 1982 & 1983; Teale & Sulzby 1986; Wells 1985).

The print and paper-based literacy, and techno-literacy findings from both the survey and the case study visits will now be discussed in light of the reviewed research literature.

Print and paper-based literacies

Storybook reading

The findings from the survey indicated that children in the three schools were being read to, at least once a day, by a parent or other family member. The importance of storybook reading has long been an important message to parents and it seems that the value of reading to children is understood by the parents of the children in these schools.

In observing the case study children in their homes, all children were supported in their early literacy learning by loving and caring parents. Like the other kindergarten children at the three schools, the case study children had storybooks read to them each day. Adam's mother encouraged reading from an early age as an educational activity and also for relaxation: *'[w]e are introducing reading habits as educational and relaxing. Our child reads by himself before bed each night'.* Winton's mother commented that, *'Winton would not go to sleep at night without a favourite book being read to him, even if it was midnight. That was his routine and he wouldn't go to sleep without his bedtime story'*.

All of the children had their own library of books and had writing materials at their disposal. Except for Adam, all children were taught to read and write by their parents; mainly their mothers. Adam's mother admitted that prior-to-school, although she read stories to him, she had not taught Adam to read or write, in case she *'did it the wrong way'.*

Storybook reading related activities

In the initial survey, many parents indicated that they participated in storybook reading related activities and that they attempted to teach their children to read and write.

These findings confirmed other studies that demonstrated that many young children are involved in a wide range of interactive literacy-related practices in their homes (Bus & van Ijzendoom 1988; Cambourne 1981; Cochran-Smith 1984; Holdaway

1979; Pellegrini & Brody 1985; Roskos & Neuman 2002; Smith 1982; Snow 1983; Teale 1984).
Also, like Hannon (1987), and Dale, Crain-Thoreson and Robinson (1995), this inquiry has shown that parents who spend time reading to their children also spend time teaching them to read and write.

All parents of the case study children indicated that they participated in a variety of storybook reading related activities. Alice's parents 'very often' *discussed and named the pictures, talked about the meanings of words, focused on the words, talked about the sounds and names of letters and discussed rhyme.* Adam's parents 'very often' participated in the above activities except, as previously mentioned Adam's mother did not tell him the names or sounds of the letters. Alexandra's mother also participated in all of the storybook reading related activities and reported that, *'Alexandra had a passion for books from a young age'* and that *'she followed with her finger under the words'* while her mother read the words, and that they sounded the words out together. With both Winton and Jacob, their fathers also read to them on a regular basis. Winton's parents would 'very often' *discuss or name the pictures, talk about the meanings of words, focus on the words and tell him the names and sounds of letters and discuss rhyming words*, while Jacob's parents only 'sometimes' *discussed or named the pictures in the books and talked about the meanings of words.*

These findings are not necessarily surprising, as it would seem rather obvious when reading to children, to *discuss the pictures* in the book and to *focus on meaning*. What is interesting from the survey is that almost a half of the parents indicated that they also *focused on the letters*, whereas, only a quarter of parents indicated that they *discussed rhyme.*

It would seem that these parents held the belief that letter recognition was an important aspect of learning to read, particularly at the beginning reading phase, whereas parents seem unaware of the benefits of discussing rhyme. This is an important finding as parents need to realise that letter recognition and phonemic awareness which includes rhyming are equally important in the learning to read process. Many studies including those by Mclean, Bryant and Bradley (1983) have found that early knowledge of nursery rhymes is strongly related to the development of phonological skills and emergent reading abilities. Bryant, Bradley, Maclean and

Crossland (1989) also indicated a knowledge of nursery rhymes at the age of three predicts reading comprehension at the age of eight.

Children's reading initiatives

An analysis of the data showed that the children in this study initiated literacy activities at home, often *asked to be read to* and *asked for favourite books to be read.* These findings are consistent with research by Doake (1988), Crago and Crago (1983) and Senechal, LeFevre, Thomas and Daley (1998).

Parents in the initial survey indicated that their children initiated all of the reading initiatives listed. There were differences, though, in the frequency of the listed initiatives with *asking to be read to, asking for favourite books to be read* and *memorising books,* being initiated more often than *reading to others*. It was apparent that even at a young age, children chose to *read to themselves* and they *read to themselves* almost half as often as they *asked to be read to.*

It is clear that from the children's perspective, the activities parents indulge in with their children are enjoyable and engaging, since a similar per cent of children, it is reported, *asked to be read to*, and moreover, *asked for their favourite book*. We know from the literature cited earlier that such reading behaviours are important indicators of children's future reading development.

The case study children also *asked to be read to, attempted to read to others, asked for favourite books to be read, attempted to read to themselves* and *memorised books* read to them. They all had favourite books that they enjoyed. Winton's mother had commented that, '*my son has always loved being read to and has definite favourites'.* She also reported that, '*Winton loves to receive books as gifts. For his birthday last week he received non-fiction books which he is enjoying listening to, and looking at the pictures'.*

Children's other reading activities

There was a difference in children's participation in other reading activities. Parents indicated that their children *read signs in the community* far more often than any of the other three reading activities. The results of the other three reading activities

were comparable, with *reading on the computer* being judged as the least favoured activity.

These findings may seem rather predictable as parents have been encouraged along with storybook reading, to engage their children in environmental print. As Alice's mother stated, '*Alice seldom uses a computer involving reading and seldom reads instructions for games, building equipment or videos etc. Alice sometimes reads other material as well as books including comics, magazines, TV programs etc. and she often reads signs in the wider community'.*

However, these parents' views on literacy learning support Beavis' (2002) concerns that the current definition of literacy tends to include only print and paper-based texts, rather than digital texts that the children would read on the computer. As Alice's mother noted, '*while we have CD-ROM [sic] pre-reading activities, we prefer to focus on reading books and magazines and street and road signs'.* It seemed this belief was also held by Adam's mother who said, *'although I believe technology has a valuable place, I am concerned that we use it too often and that it may take the emphasis off reading and learning basic skills. I also think it can create social problems if a child is always using the above technology'.*

Library visits and children's home libraries

Parents who took their children to the library indicated they were more likely to encourage their children to choose their own books than help them choose appropriate books. As Winton's mother commented, '*Winton visits the local library every weekend with his dad. Winton often chooses his own books and sometimes his dad helps him to choose appropriate books'.*

All but two children in the study had their own library of books at home with almost half of the children owning more than 60 books, magazines or comics.

Once again the fact that children were taken to the library and that parents and other family members purchased books and other print and paper-based materials for the children clearly indicates that parents value reading as a print and paper-based activity.

Children's writing activities

All parents indicated that writing materials were available in the home, that children were provided with writing materials from as early as six months and that the children scribbled and drew from this time. Parents also indicated that the children *wrote their own names* in preference to any other writing activity. This is understandable as young children usually learn to write the letters in their names before they learn to write other letters. The next most preferred writing activity was *writing letters and/or words* with the least preferred writing activity being *writing on the computer*. As mentioned previously, parents in this inquiry engage their children in, and seem to value print and paper- based literacies more than techno-literacies.

Techno-literacies

Children's technology use

The survey responses and case study information supported recent studies by Lankshear (1997), Casey (2000b), Snyder (2002), Lankshear and Knobel (2002, 2003) and Hill (2004) as to the increasing role of technology in literacy learning at home and the risk-free environment provided by parents for children's technology learning.

The children at the three schools used many technological devices that were available in the home, used *computer programs* and the *internet*, *listened to talking books*, used *multi-media CD-ROM* and *played portable and TV game machines.*

None of the children at any of the three schools regularly used *email.* This is possibly because email involves using a word processor and children at this age are still learning to recognise letters, and only know how to write a very limited number of words. This activity may also not be encouraged by parents or other family members as it is an activity on the computer that the child would need more assistance with. And perhaps as the comment below portrays, parents are unaware of the benefits of using email to develop both reading and writing skills:

> Technology could help with reading although you can learn to read just as well without it. Learning to write doesn't require any technology just pencil and paper.
>
> (Parent Questionnaire, Parent of a girl, School 1, March 2005)

In contrast to the parent comment above, educators have promoted electronic mail as a powerful medium for the development of beginning writers (Bowen 1994; Durost & Hutchinson 1997; El-Hindi 1998; McKeon 1999; Sturtevant & Padak 1998; Upitis 1990; Wollman-Bonilla 2003).

The children at all of the schools had a wide variety of technology devices available in their homes, many of whom had sole use of some of the devices. Almost a third of the children from the three schools 'often' and 'very often' *played computer games* with varying percentages 'often' and 'very often' using other technology. This inquiry in relation to the use of technology devices in their homes confirmed other studies that report on young children's out-of-school use of technology (Casey 2000b; Downes 1999; Healey 2000; Moulton 2000; New London Group 2000).

Two of the case study children, Winton and Jacob were, as Casey (2000b, p4) claims, "as fearless using the keyboard as they [were] exploring other exciting parts of the environment*".* During a home visit to Winton's house, anecdotal records included,

> Winton then went into a 'Paint' program. He drew a picture. He was fascinated by one of the icons and clicked it several times. … Winton kept changing the background colour. There were eight choices of colours and Winton tried every one of them. He then made many of the pictures with the same colour background so that the object could not be detected but with others, he mixed all the colours together. He could read the words 'STOP' and 'EXIT' and knew what the words meant and what would happen when he clicked on these words.
>
> (Anecdotal records, Home Visit, 15 May 2005)

And during a home visit at Jacob's house, anecdotal records included,

> Jacob quickly learnt new skills on the computer. He was never afraid to make a mistake and thought it was fun. He could navigate around the screen with ease and kept repeating a new skill over and over again. When I showed him how to make a document larger, he laughed contagiously out loud and made every document as large as he could and then made it smaller again.
>
> (Anecdotal records, Home Visit, 4 August 2005)

And also on another home visit, anecdotal records at Jacob's home included,

> He opened the word document, saying 'go, go, go'. He typed madly on the letters, writing nothing at all but filling the page with letters. Jacob then made the letters bigger and bigger. He then went back, highlighted all of the text and deleted it. He pressed the space bar. He then pressed the 'Caps Lock' key and typed in more letters, all in capitals. Once again he highlighted all of the letters and deleted them.
>
> (Anecdotal records, Home Visit, 18 August 2005)

The other three children; Alice, Adam and Alexandra had several technology devices in their homes. Alice had sole use of a CD player and used this quite extensively when dancing. She was also competent at using several programs on the computer but reported and that she '*had not used the computer for some time'* and that she *'did not use the computer between my home visits'*. Although Alice was as competent in computer use as both Winton and Jacob, she did not experiment like they did nor show the enthusiasm that they demonstrated for computer use.

With computers, Adam had been exposed to computer games at his grandparents' house and had also received and sent emails with their help. Adam, though, had not used a computer at home, prior to my visits, because of availability. The only computer was his father's work laptop and his mother feared that Adam could break it. Despite Adam's lack of familiarity with technology, he was not afraid to trial any of my suggestions. Like Casey (2000b, p4) found, "young children are much more willing to use and experiment with the new technology than are adult learners who, after years of failure, are reluctant to risk failure*".*

Despite not having previous access to a computer at home, Adam very quickly became conversant with several of the functions of the computer and with the operations of several of the icons. He was able to draw upon his learning from exposure to computers at his grandparents' house and from computer lessons at school. On one home visit, anecdotal records included,

> Adam came out into the hallway to greet me and excitedly said 'Do you want to see how I go on the internet? It is the thing with the big 'e' on it'.
>
> (Anecdotal records, Home Visit, 9 June 2005)

Alexandra's family owned several technology devices but did not own a functioning computer. There was an old one in a box on the front veranda, but it had not been set up. Prior to starting school, Alexandra was exposed to the computer only at her cousin's house and once she started school, had weekly computer lessons. From her learning at school, at one of the home visits, she reported,

> You press Control, Alt, Delete to get on and there is an arrow on the thing and then you click it.
>
> (Anecdotal Records, Home Visit, 29 June 2005)

Despite not having a functioning computer in the home, Alexandra's mother was supportive of the value of technology in her daughter's learning. Anecdotal records included,

> Technology is an important and evolving part of learning to read and write. Its importance has increased greatly as time passes. The value, therefore, is high and significant.
>
> (Initial Parent Questionnaire, March 2005)

Like Alexandra's mother, a high percentage of parents in the survey believed that technology was of value in learning to read and write.

It seems, therefore, that the majority of parents thought that technology was a useful tool for teaching their children to read and write; however, it was also clear from their responses to the other questions that they believed it was far more important to read books to their children. The following comments demonstrate the range of views held by parents regarding their children's developing techno-literacy skills. For many parents, these were viewed in the same vein as 'play' and therefore not 'academic'.

> I think there is a place for technology in learning to read and write but definitely reading books to my children every day has helped them to enjoy reading.
>
> (Parent of boy, School 1, March 2005)

> My children probably still value books the most and it is the best interactive form of teaching. Techno devices start off with good intentions but often disintegrate into an easy way for us parents to entertain the children, so we

tend to leave the children alone playing games rather than sitting with them and teaching.

(Parent of girl, School 1, March 2005)

> I feel it is important for children to learn about technology as it is their future as they will need to know these skills in the workplace.
>
> (Parent of boy, School 2, March 2005)

> The access to learning and teaching internet sites has been invaluable for me while teaching my child to read.
>
> (Parent of girl, School 2, March 2005)

> I think it can be very useful – it attracts the child's attention but it has to be backed up with 'old fashioned' books as well – technology is not everything.
>
> (Parent of boy, School 3, March 2005)

> Computers and computer games are great but it should be balanced with reading from books.
>
> (Parent of girl, School 3, March 2005)

Interpretive summary

It is clear that the children in this inquiry had storybooks read to them on a regular basis. Parents participated in a variety of literacy related activities when reading to their children. The children also initiated many activities themselves. They participated in a range of other reading and writing activities, visited the library and had their own library of books.

The children also had a variety of technological devices available to them in their homes with the majority of children having access to a computer. However, it can be deduced from the parents' comments that many parents viewed reading and, in particular learning to read, as being primarily the domain of print and paper-based materials. While techno-literacy practices might be considered important and certainly present in the daily lives of their children, it seems they are viewed as '*an addition to'* print and paper-based literacy activities, rather than an activity *'instead of'* print and paper-based literacy activities. What is clear, though, is that children do have many opportunities to develop techno-literacy skills, as well as print and paper-based literacy skills in their homes.

These findings support earlier literature that shows parents hold the view that reading to their children is an important precursor to learning to read. The next section will

discuss the relationship between the kindergarten children's multiliterate practices in their homes and socioeconomic background.

Relationship between the Kindergarten Children's Multiliterate Practices in their Homes and Socioeconomic Background

Introduction

The research cited previously established that prior-to-school experiences in storybook reading and other literacy related activities in the home affect success in literacy at school. There is also evidence that socioeconomically disadvantaged children may have limited access to the range of literacy activities experienced by children from high socioeconomic backgrounds (Arnold & Doctoroff 2003). This inquiry explored literacy practices in the homes of children from three Sydney metropolitan schools and while these three schools are not diametrically opposed in terms of socioeconomic advantage and disadvantage, there appears to be some socioeconomic differences among them.

Print and paper-based literacies

Storybook reading

The children in this study at Schools 1 and 2 on average read around 11 storybooks each week, however, families at School 3 on average read only 7 storybooks each week. This finding is consistent with a previous finding by Senechal at al. (1998) when they found that parents of high and middle class families on average read 11 storybooks each week to their kindergarten children,.

School 3 has been identified as being less advantaged than the other two schools. At School 3, a higher percentage of families live in units or flats compared to families at either of the other two schools. With limited access to play areas outside, and more of their time spent indoors, one might expect, that the children would have *more* storybooks read to them each week rather than *fewer* storybooks.

The percentage of single parent families at School 3 was higher than at the other two schools. Thus, this factor may have contributed to fewer storybooks being read to the children at School 3, as single parents tend to have far more responsibility in the home on a daily basis and thus less available time for reading to children.

All case study families supported their children's early literacy learning through the regular reading of storybooks, and there was no noticeable difference in the *frequency* of adult-child shared storybook reading.

Interestingly White (1982) found a weak correlation between school achievement and parent occupation, income or education, and he concluded that *how parents interacted with their children* could make the difference. In contrast, Cairney and Munsie (1995), however, found that *differences in family backgrounds* appeared to account for a large share of variance in student achievement including literacy.

Storybook reading related activities

Parents from all three schools *discussed rhyme* half as often as they *discussed the pictures* and parents at *School 3 discussed rhyme* far less often than parents at the other two schools. Parents at School 1 *focused on the words* far less often than parents at the other two schools. However, results for other storybook reading related activities at the three schools were fairly comparable.

It seems understandable that parents would discuss the pictures in storybooks more often than other reading related activities as young children tend to have more understanding of and interest in the pictures than the text. However, it is interesting that parents indicated that they focus on words and letters and discuss meanings of words more often than they focus on rhyme. As noted earlier understanding the value of rhyme in learning to read is an important message for parents.

With the case study children, parents and children participated in all of the activities with frequencies of the activities varying across all of the children.

Alice asked many questions when her parents were reading to her and her father also animated his versions of storybook reading. Adam asked about the meanings of words and, as previously cited, Adam's mother did not tell him the names or sounds of letters as she had always been afraid of *'doing it the wrong way'.* When reading

together, Alexandra followed with her finger under the words while her mother read the words, and they sounded out the words together. Jacob and Winton also enjoyed and participated in storybook reading related activities.

Children's reading initiatives

With children's reading initiatives, fewer children at School 1 *asked for books to be read or asked for favourite books* than at the other two schools. Interestingly, the children at School 3 who had fewer storybooks read to them than children at the other two schools, more often requested books to be read to them. Family members, though, did not respond to these requests as often as they did at Schools 1 and 2.

These family and community differences are important and can have long lasting effects on success in literacy at school. The culture of the child's family and community, and the ways in which they value learning have been shown to be predominant factors in the ease in which the child becomes accepted into the school's culture. This, in turn, has a significant effect on the child's progress. As stated by McLachlan (2007, p22), "[u]nfortunately, socioeconomic (SES) differences in literacy skills emerge very early".

Findings on the other reading initiatives were fairly similar across schools.

An analysis of the data from the case study children did not show any marked difference in children's reading initiatives. Any differences that did occur were inconsistent and have been previously described in detail.

Children's other reading activities

There were some differences among the schools in this question with the greatest difference being in *reading on the computer.* At School 3, more than twice as many children *read on the computer* compared to children at Schools 1 and 2. Interestingly, these same children who more often *read on the computer* were the same children who had fewer storybooks read to them.

It was also interesting to note that the least preferred activity overall, *reading on the computer* was the activity most preferred by the children at School 3. It is

encouraging, though, that while these children at School 3 had fewer storybooks read to them, despite their asking, that at least they experienced reading on the computer.

Library visits and children's home libraries

Once again there were differences among schools with more than twice as many children at School 3 visiting the local library compared to the other two schools. There are two possible explanations for this finding. The children at School 3 live within close proximity to, and within walking distance of the local library while children at the other two schools do not have a library nearby. Also, the local library is a free service and, therefore, possibly visited more frequently by families from a lower socioeconomic background.

More parents at School 3 also allowed their children to choose their own books at the library compared to parents at either of the other two schools. The percentage of parents at each of the schools who helped their children to choose appropriate books was fairly similar.

Once again it is encouraging that parents use the services of the local library but even more encouraging that parents from lower socioeconomic backgrounds value borrowing books for their children from the local library.

Among the case study children, all of them frequently visited the library, apart from Jacob whose visits were described as '*seldom*' by his mother. Visiting the library was a most frequent activity for Winton as he and his father visited the library almost every weekend. According to Winton's mother, Winton viewed this time with his father as being a very special time together. Also while at the library, Winton's father showed Winton how to search for books on the library computer terminals. Winton's mother had laughed about Winton being almost able to spell '*Spiderman'* as well as he could spell his own name.

All case study children, apart from two children in the survey, had their own library of books at home. Differences emerged, though, as to how the children built up their library of books. Children at School 3, including Alexandra were more likely to have books that were hand-me-downs, from garage sales or received as gifts. Children from the other schools also received books as gifts; but, books purchased by parents

and purchased through 'Book Club', from the school, complemented the other books in their libraries.

Children's writing activities

The preferred writing activity at each of the three schools was *writing their own name* with very comparable results across schools. The least preferred writing activity at School 1 and 2 was *writing on the computer,* however, at School 3, a third of children *wrote on the computer.* Findings across all other writing activities were inconsistent.

All of the case study children, except Winton enjoyed drawing and writing; they wrote their own names, letters that they knew and they tried to write words. Alice, Adam and Jacob copied words from packets and other items around he house. Alexandra loved to draw. Winton was not interested in writing before attending school and was late in developing hand preference. Writing his name before commencing school was a result of his mother's perseverance, not his interest. None of the case study children used a word processor for writing prior to attending school, although Jacob's mother indicated that Jacob had been on the computer since he was two years of age and that he was familiar with the internet.

Techno-literacies

Children's technology use

ABS (2001) data indicated that computer use by the children at School 1 was far higher than computer use at Schools 2 or 3. With families at School 1 having a high SES background, these children possibly have more access to computers in their homes. The issue of access is crucial to learning with new technologies and as Luke (1999, p99) states, "[w]hile working class parents might struggle financially to purchase an entry level computer, more privileged families can afford higher-end technologies and monthly Internet access fees".

However, in contrast to the ABS (2001) information, the data from this study indicated that the children from School 1 used only *portable and TV game machines* more often than the children at School 3. The children from School 3 used all other technologies including *reading and writing on the computer*, *computer programs, the*

internet, talking books and multi-media CD-ROM more often than the children from either Schools 1 or 2.

One possible reason for this higher use of technologies at School 3 could be because three quarters of the children at School 3 lived in dwellings other than separate houses and, therefore, had limited access to playing out-of-doors.

Interestingly, and in contrast, an analysis of data about technology use from the home visits to the case study children confirmed the ABS (2001) data but not the data from the survey of the families at the three schools. Both Winton and Jacob who attended School 1, a high SES school population, demonstrated use of, familiarity with, and interest in the use of technology including experimenting with the computer while Alexandra from School 3 had never had any access to a computer at home.

While Alice from School 2 displayed competence with many computer programs, this competence was a result of parental encouragement and instruction rather than an interest in technology. Apart from the CD player that she used for dancing, she did not demonstrate an interest in other technologies available in the home. Adam from School 2 had limited use of technology including using a computer.

The above findings are inconsistent and, therefore, inconclusive.

In analysing parents' views about the value of technology in learning to read and write, parents at all of the schools made more supportive than non-supportive comments and there were only minimal differences among the schools.

Interpretive summary

An analysis of the data from this inquiry showed some differences among the multiliterate practices in the homes of the kindergarten children at the three schools, raising questions about early literacy learning in relation to socioeconomic background.

The literature that claims children do not begin school as equals because of family background tends to focus on a 'deficit view' of children's prior learning at home. In doing so this literature suggests that the responsibility for children's literacy learning and, consequently, later success at school has strong connections to family

background. Other literature, however, confirms the important role of the teacher in valuing children's prior-to-school learning experiences and *'building a bridge'* into school literacy practices. In doing this, success in school literacy is possible for all children.

The data analysis of this study confirmed that while there are differences in literacy related learning activities in the children's homes, parents from all of the three schools play an active role in their children's literacy development providing a variety of contexts to support their children's early literacy learning.

Furthermore, this study has highlighted a higher use of technology in School 3 (lower SES) on most technology devices. While the children at School 3 may have had fewer storybooks read to them, they experienced reading and writing on the computer far more than the children at the other schools. This now brings into question the role of technology in developing emergent literacy skills and the possibility that technology use could compensate for any detrimental effects in early literacy learning related to socioeconomic background.

This study suggests that questions about why children with similar classroom experiences show different levels of educational achievement and why these differences persist cannot be simply explained by differences in socioeconomic background. More important than the children's socioeconomic background, Comber and Kamler (2004) argue that children need to be given the opportunity at school to use their *'funds of knowledge',* learnt in the years before school. Wells (2006) also argues that the teacher can make all the difference by '*building a bridge'* from home literacy experiences to school literacy.

We will now examine early literacy learning in relation to gender.

Relationship between the Multiliterate Practices of the Kindergarten Children in their Homes and Gender

Introduction

In relation to children's gender, many studies have researched child development (Alloway 1995; Berk 1997; Huston 1983; Mertens 1998; Picariello, Greenberg & Pillemer 1990) and language and literacy development in relation to children's gender (Cairney & Ruge 1997; Freebody, Ludwig & Gunn 1997; Makin 2005; Nichols 2002; Razey 2002). Moreover, parents and teachers over the years have held very definite beliefs about the differences in boys' and girls' development, behaviours, interests, skills, and abilities in both the home and the school. But often these beliefs, as cited previously by Nichols (2002), have not been based on research.

Gender issues have long been debated in educational circles and within families and the community. These debates, too, have included boys' and girls' orientations towards literacy learning. Furthermore, according to Makin (2005), in many research articles mothers and fathers have been found to behave differently with their sons and daughters; and, as Berk (1997) argues, gender stereotyping of activities and occupations is well established by the age of five.

Despite all of this research to the contrary, many parents and teachers espouse *'well, he's a boy'* when explaining either a boy's lack of interest in, or slow progress in literacy related activities. This inquiry about kindergarten children's multiliterate practices in their homes has added to previous research in relation to gender differences in early literacy related activities and will provide convincing evidence for consideration by those who claim '*well, he's a boy'.*

Print and paper-based literacies

Storybook reading

In contrast to the gender studies cited above, in this inquiry, from the parent survey, parent storybook reading across the three schools showed almost no difference in

the average number of storybooks read each week to the boys compared to the number read to the girls.

With the case study children, three boys and two girls, there were no apparent gender differences in relation to storybook reading. All children were read to by their parents and/or family members on a regular basis and it was Winton, a boy, who would not go to sleep at night without a storybook being read to him.

Storybook reading related activities

Gender differences emerged, though, in the storybook reading related activities that parents participated in with their children. While reading to their children, boys' parents *focused on the words and the letters in words* more than the girls' parents, but the girls' parents *discussed the pictures in the book, discussed the meanings of words and discussed rhyme* more often than the boys' parents.

The greatest difference across all of the storybook activities was in the *discussion of rhyme* where girls' parents *discussed rhyme* more than twice as often as the boys' parents. Interestingly, all of the storybook activities parents participated in with their girls involved 'discussing' whereas *focusing on words and letters in words* that parents participated in with boys involved only 'telling'. This gender difference in storybook reading related activities supports previous research about gender differences by Barnhart (1991), Berk (1997), Wigglesworth (1997), Fivush (2000), Smolkin and Donovan (2000), Peterson (2001), Nichols (2002) and Makin (2005).

Parents were also more likely to teach their girls to read and write than their boys and when visiting the library helped their girls choose appropriate books almost twice as often as they assisted their boys.

Alice's parents participated in all activities and indicated that they found rhyming words all the time and after explaining to Alice about words, she now focused on them and asked about them. Alexandra's mother also participated in all of the reading activities and Alexandra followed her mother's reading with her finger under the words. Her mother would also help her to sound out words.

Adam's parents did not focus on the *letters in words* because they thought they would *'do it the wrong way'*; however, they participated in all other reading activities

and Adam sometimes asked about the *meanings of words.* William's parents participated in all reading activities, while Jacob's parents only *discussed the pictures* and talked about the *meanings of words.*

Analysis of case study data, therefore, did not support survey findings in relation to gender differences and rhyme. All parents except Jacob's *focused on rhyme,* indicating that case study parents valued rhyme as highly as other reading related activities.

Children's reading initiatives

In Makin's study (2005), gender differences were found in a range of early literacy behaviours. Boys were found to be more likely to have a favourite book and to enjoy being read to, but less likely to initiate the experience of being read to. This inquiry found that boys *asked for favourite books to be read* more often than girls but the girls initiated *asking to be read to, reading to themselves, reading to others and memorising books* more often than the boys.

The greatest differences included: *reading to themselves*, where girls read to themselves more than twice as often as boys; and, *reading to others*, where girls read to others more than three times as often as boys.

There were some gender differences in child initiated reading activities with the case study children. Adam was not only interested in, but loved reading and initiated all reading activities. However, in contrast, both Winton and Jacob displayed a lack of interest in reading. Winton's parents indicated that Winton seldom read to others but that he initiated all other activities while Jacob's parents indicated that he never read to himself or others and that he only seldom asked to be read to; however, when he was read favourite books, he memorised these books.

On the other hand, both of the girls, Alice and Alexandra initiated all of the reading activities.

Children's other reading activities

An analysis of survey data showed gender differences in two of the four other reading activities with almost twice as many girls as boys *reading signs in the community,* while more than twice as many boys as girls *read on the computer.* Gender differences for the other two reading activities were minimal.

Findings were inconsistent with the case study children and an analysis of the data did not confirm gender differences in the above *other reading activities.*

Both Alice and Alexandra used a computer involving reading less often than other reading activities; however, Adam seldom read on the computer while often participating in all other reading activities. Winton participated equally in all reading activities while Jacob sometimes read on the computer and read signs in the community, often read instructions but seldom read other printed reading material.

Alice, Alexandra and Adam frequently read signs in the community while both Winton and Jacob only sometimes read these signs.

Library visits and children's home libraries

From an analysis of the survey data, parents of boys took their children to the library as often as girls' parents; however, fewer boys' parents allowed their children to choose their own books, while more boys' parents helped their children to choose appropriate books. While these differences are of little consequence, what is important is that the parents of both boys and girls value the role of the library in their children's early literacy development.

Except for one boy and one girl, all boys and girls in the survey, and the case study children had their own library of books at home.

Children's writing activities

There were gender differences in the survey about children's writing activities. The boys *wrote on the computer* more than twice as often as the girls; however, the girls participated in all other writing activities more than the boys, with the largest differences being *writing others' names, writing about events and/or possessions* and

writing pretend letters to people. Writing their own name was fairly comparable between boys and girls.

As mentioned in the previous section of this chapter, all of the case study children except Winton participated in, and enjoyed writing activities.

Techno-literacies

Children's technology use

Information from the Australian Bureau of Statistics; Census 2001 (this question was not included in the 2006 census) showed computer use in the 0-9 years of age category to be very similar for boys and girls across NSW, with minimal gender differences in computer use at the three schools in this study.

In contrast, an analysis of survey data from the three schools in this study indicated that the boys used *computer programs*, *multi-media CD-ROMs* and *TV game machines* more than the girls. However, girls used *talking books* seven times as often as boys and *portable game machines* more than the boys. Boys and girls had the same *use of the internet and email*.

In several studies, gender differences in children's technology use have been inconsistent. Abel (2001) found that effects of email use in English acquisition of 4-5 year-old children of mixed language backgrounds did not vary significantly by gender. Erdner, Guy and Bush (1996) measured the effect of computer-assisted instruction (CAI) on the conventional reading skills of first grade students by whole group and by gender. They found that CAI improved reading scores for all students but the boys achieved higher results than the girls when CAI was implemented. Like Abel (2001) and Erdner et al. (1996), an analysis of the data in this study shows differences in technology use by boys and girls. The boys use some technology devices more than the girls, and the girls use some technology devices more than the boys.

In the survey, from the analysis of the parents' views on the value of technology in learning to read and write, there were noticeable gender differences in attitude. The boys' parents valued technology more than girls' parents. This gender difference was greatest at School 1 (high SES), where twice as many boys' parents valued the role

of technology in learning to read and write compared to the girls' parents. The gender differences in parents' attitudes at Schools 2 (middle SES) and 3 (lower middle SES) were minimal.

Data from the case study visits in relation to technology use was extensively discussed in the first section of this chapter and while there were individual differences among the children in their use of technology, an analysis of the data did not confirm that these differences were related to gender.

Alice was competent at using the computer and under parental guidance practised many of her emerging literacy skills with relevant computer programs while Alexandra did not have access at home to a computer. This access, though, was not because of gender.

Adam had not used a computer at home prior to my visits; however, during the months while I visited Adam in his home, his parents provided access on his father's laptop from work. As with Alexandra, Adam's limited computer use in the home was not related to gender. In contrast, both Winton and Jacob had extensive use of a home computer and regularly experimented with various programs. Use of the computer, though, was one of availability and access, not gender.

Interpretive summary

Several gender differences emerged between the multiliterate practices of the kindergarten boys compared to the girls. These findings confirmed previous research about boys and girls gender stereotyping from an early age, and their different orientations towards storybook reading related activities. This was particularly evident in the reading related activities, where parents behaved differently towards their boys compared to their girls. Interestingly, boys' parents tended to value technology in learning to read and write more than girls' parents. Based on these findings, future gender-based research in relation to parental influence in children's techno-literacies in the home would add to this inquiry, and also to previous research in this area.

If parents believe that boys are not as capable as girls in literacy related activities, Nichols (2002) argues, that this belief will have implications for their expectations. And if this belief about boys and girls capabilities in literacy related activities is also

held by teachers, then similarly their beliefs will also affect their expectations of the boys and girls in their classrooms.

It was of some concern that only half as many parents discussed rhyme with their children compared to any other storybook reading related activity. Several studies have shown the positive effects of rhyme on later reading success. Mclean et al. (1983) found that early knowledge of nursery rhymes was strongly related to the development of phonological skills and emergent reading abilities. Also, Bryant et al. (1989) indicated a knowledge of nursery rhymes at the age of three predicted reading comprehension at the age of eight.

This is an important message for parents and early years' educators about the relationship between rhyme and developing phonemic awareness, as the research is very clear about the importance of phonemic awareness in learning to read and future success in reading (Adams 2002; Lonigan, Burgess & Anthony 2000; Morris, Bloodgood & Perney 2003; Pullen & Justice 2003; Stuart 1995; Ukrainetz et al. 2000; Whitehurst & Lonigan 1998).

It was also interesting that only half as many boys' parents discussed rhyme compared to girls' parents. Focusing on rhyme, therefore, is an important message for parents and educators of boys. Based on the findings from this inquiry, future gender-based research that especially focuses on rhyme would be beneficial.

But, as Alloway (2007, p263) states, "the picture is not a simple one of boys versus girls, but one that suggests an interplay of contextual and social factors". Gender is an important factor to address in the early years of literacy learning. However, the focus, rather than being on boys' deficits in literacy compared to girls, needs to be on ways in which boys will identify literacy as an important part of their social and cultural worlds. This may be achievable through technological forms of literacy practice and in using a range of popular cultural forms. As Alloway (2007, p261) argues, "[l]iteracy may then come to seem less 'feminised' and more functional and important in the 'real' worlds of work and adult life". Alloway (2007, p261) also claims that, "in understanding literacy learning, it is necessary, but insufficient to focus on gender".

Across New South Wales, girls consistently outperform boys in state-wide literacy tests. Higher percentages of girls compared to boys also reach national benchmarks

in reading and writing. Boys also, on average, display lower levels of success in school-based literacy than do girls, in national inquiries in both New Zealand and the United Kingdom (Alloway 2007).

What is needed is a change in focus in literacy learning in schools so that boys will view literacy differently. Also increased use of technology in learning to read and write may, in the future years, benefit boys. Smolkin and Donovan (2000) found that boys prefer information books to narratives. Pahl (1999) also suggested that boys are disadvantaged in early childhood settings because their interest in popular cultures is viewed negatively. To understand just these simple differences in text preference and to provide more information books and texts about popular culture in classrooms have the potential to interest boys more in literacy activities. Razey (2002) also found that depending on the text chosen in early literacy classrooms, boys were able to interact more freely in group discussions. This is another area for future gender-based research that would have implications for parents, early years' educators and policy makers.

At the national level, however, the focus in literacy learning in schools is changing. In 2006-2007, the 'Success for Boys' project, with costs exceeding $19 million focused on early literacy success for boys in many of the schools involved (Alloway 2007).

In this next section, the relationship between the multiliterate practices and skills of the kindergarten children and the expectations in the first year at school of current policy and curriculum of the New South Wales (NSW) Department of Education and Training (DET) will be discussed.

Relationship between the Multiliterate Practices and Skills of these Kindergarten Children and the Expectations, in the First Year at School, of Policy and Curriculum of the New South Wales (NSW) Department of Education and Training (DET)

Introduction

As outlined previously in Chapter Four, the curriculum taught in NSW public schools in both primary and secondary schools is governed by the syllabuses developed by the Board of Studies (BOS) NSW. These syllabuses are mandatory documents for all teachers in NSW employed by the DET. It is reasonable to assume, therefore, that the teaching and assessment of literacy in the first year at school would be underpinned by current syllabus definitions of what constitutes literacy in the 21st century.

In this section of this chapter, the relationship between the case study children's multiliterate skills and practices and the expectations of the *Best Start: Kindergarten assessment* (NSW DET 2007), *Computer-based Technologies in the Primary KLAs* (NSW DETCSD 1997) and the *English K-6 Syllabus* (Board of Studies NSW 2007a) are discussed. Note that only the findings from the case study children are drawn on for this section as only these children were assessed on their multiliterate skills.

Best Start: Kindergarten assessment (NSW DET 2007)

The assessments in 'Best Start' are to be implemented across all NSW public schools from 2008-2010. Each year in the targeted schools, assessments are to be completed by Week 7 of the first term at school. The assessments include both literacy and numeracy; however, for the purpose of this inquiry, reference will only be made to the literacy assessments.

In the 'Literacy task booklet' of *Best Start: Kindergarten assessment* there are five assessment tasks linked to outcomes in the *English Syllabus K-6* (Board of Studies NSW 2007a), as outlined in Table 7.1 (overleaf).

Best Start: Kindergarten literacy assessments

Code: R - Reading; T - Talking; W - Writing; ES1 - Early Stage 1
Nos. correspond to outcome nos.

Please see print copy for Table 7.1

Table 7.1 Best Start: Kindergarten literacy assessments (NSW DET 2007, pp4-5)

Case study children's print and paper-based literacy assessments

Clearly the 'Best Start' program had not been instigated in schools when the five case study children in this inquiry were in Kindergarten. However, it is interesting to examine the print and paper-based literacy skills and practices of Alice, Adam, Alexandra, Winton and Jacob in relation to 'Best Start', taking into account that observations of the case study children began in May and continued throughout Terms 2 and 3 with the last assessments occurring in August towards the end of Term 3.

In print and paper-based literacies, the case study children were assessed on similar criteria as is being asked in Best Start (Table 7.1). Table 7.2 outlines the children's results in the assessments given during the course of home visits.

Case Study Children's Print and Paper-based Literacy Assessments

Rankings: Below (expected level), At (expected level), Above (expected level)

Literacy skills	*Alice*	*Adam*	*Alexandra*	*Winton*	*Jacob*
Sight words on the Johnson Word List (List A) (Appendix H)	23/25 Above	16/25 Above	4/25 Below	18/25 Above	8/25 Below
Phonemic awareness on the Sutherland Phonological Awareness Test (SPAT) (Appendix I)	49/58 Above	36/58 Above	26/58 At	36/58 Above	21/58 At
Reading texts including comprehension using the PM Benchmark Reading Kit (Appendix J)	Level 15 Above	Level 6 At	Level 3 Below	Level 9 Above	Level 8 Above

Table 7.2 Case study children's print and paper-based literacy assessments

Case study children's print and paper-based literacy skills

Alice

The assessment outcomes outlined in Table 7.2 show that Alice is achieving above the expectations for kindergarten children at this stage of the year on all assessment tasks. She has an extensive bank of 'sight' words that assists her in reading

accurately and fluently. Her phonemic awareness is well developed enabling her to easily decode unknown words. She reads with comprehension at a level of text above the expectation for a kindergarten child towards the end of Term 3 at school.

Adam

The assessment outcomes outlined in Table 7.2 show that Adam is achieving above the expectations for kindergarten children at this stage of the year on the Johnson Word List and the SPAT, and at the expected level of reading text on the PM Benchmark Reading Kit. He has a well developed bank of 'sight' words that assists him in reading accurately and fluently. His phonemic awareness is well developed enabling him to decode unknown words. He reads with comprehension at a level of text at the expectation for a kindergarten child towards the end of Term 3 at school.

Alexandra

The assessment outcomes outlined in Table 7.2 show that Alexandra is achieving below the expectations for kindergarten children at this stage of the year on the Johnson Word List and below the expected level of reading text on the PM Benchmark Reading Kit. Her results on the SPAT, however, are above the expected level for kindergarten children at this stage of the year. For Alexandra, this means that she is able to decode unknown words but because she does not have a large enough bank of 'sight' words, her reading fluency is slow and her accuracy is poor. Both her fluency and accuracy are affecting her reading comprehension. She is, therefore, reading at a text level on the PM Benchmark Kit below the expected level for kindergarten children towards the end of Term 3 at school.

Winton

The assessment outcomes outlined in Table 7.2 show that Winton is achieving above the expectations for kindergarten children at this stage of the year on all assessment tasks. He has an extensive bank of 'sight' words that assists him in reading accurately and fluently. His phonemic awareness is well developed enabling him to easily decode unknown words. He reads with comprehension at a level of text above the expectation for a kindergarten child towards the end of Term 3 at school.

Jacob

The assessment outcomes outlined in Table 7.2 show that Jacob's 'sight' word score on the Johnson Word List is below the expected level while his score on the SPAT is at the expected level. Interestingly, Jacob is achieving above the expectations for kindergarten children at this stage of the year on the level of reading text on the PM Benchmark Reading Kit despite only having a bank of 8 'sight' words on the Johnson Word List.

Summary: Case study children's print and paper-based literacy assessments

The *Best Start: Kindergarten assessment* (NSW DET 2007) goal is to provide similar important information about children's early literacy learning; however, such information does not tell *'the whole story'* about what a child knows and brings to school in his or her *'school bag*' from home.

Many factors affect children's success in literacy as have been cited in this inquiry, and these five case study children, although living within a ten kilometre radius of each other, have come to school with complex histories as family and community members. These histories have already shaped them as young learners and, in their diversity, teachers will help shape their understanding of what it means to be an educated person. These children, like all young learners will need to experience teachers' instructional strategies that serve as '*bridges into literacy'* if they are to succeed at school. Their early literacy learning and how they view themselves as learners will affect later school success.

As Mehan, Hertweck and Meihls (1983) argue, "[b]ecause of the nature of children's school careers, such early learning failures are likely to be magnified in later school performance" (cited in Cook-Gumperz 2006, p12).

The *Best Start: Kindergarten assessment* (NSW DET 2007) will inform evidence-based practice in kindergarten classrooms and while this could be a positive step forward, educators need to be aware that, "testing regimes can lead to a focus on atomistic skills, rather than a more holistic approach in which children are active participants in the construction of meanings that reflect their experiences" (Makin 2007, pp10-11).

No longer, though, in our fast paced technological world is literacy confined to print and paper; it has multiple dimensions. These dimensions, as well as including

cultural and linguistic diversity, also embrace the multimodal literacies of information communication technology (ICT) and other digital technologies. As Hill and Nichols (2006) argue, “literacy is changing and young children are increasingly exposed to communication tools and situations that are multimodal rather than exclusively linguistic” (cited in Hill 2007, p57). This requires new thinking about the new practices of literacy.

‘Best Start’ may identify print and paper-based literacy skills of kindergarten children on entry to school. It does not, however, identify and, therefore, value the many other literacy skills, the equally important techno-literacy skills that children bring with them to school that they have learnt in their out-of-school worlds, prior to school entry.

Computer-based Technologies in the Primary KLAs (NSW DETCSD 1997)

In this inquiry, the multiliterate skills and practices of kindergarten children, not only their paper and print-based literacies were explored and have been comprehensively detailed in the previous chapter. We will now examine the technology practices and skills of the children as they relate to the expectations of NSW DET policy and curriculum in the document *Computer-based Technologies in the Primary KLAs* (NSW DETCSD 1997).

All of the case study children had technology devices in their homes. Table 7.3 (overleaf) outlines the case study children’s scores on the assessment of kindergarten technology capabilities.

Early Stage 1 (Kindergarten) Technology Capabilities

An assessment of the Case Study Children's Techno-literacy Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Alice	*Adam*	*Alexandra*	*Winton*	*Jacob*
Identifies the basic parts of computers and their functions.	Above	At	Below	Above	Above
Uses and understands computer terms.	Above	At	Below	Above	Above
Experiments with using the computer mouse and keyboard.	Above	At	Below	Above	Above
Views and discusses graphics on the screen.	Above	At	Below	Above	Above
Experiments with paint or draw software to see how it operates and the effects that can be created.	Above	Below	Below	Above	Above
Uses computer software programs to create texts.	Above	Below	Below	Below	Below
Uses drawing software to create pictures for scribed texts.	Above	Below	Below	At	At
Accesses and inserts a picture from a file.	Above	Above	Below	Above	Above
Understands how the internet can be accessed and used.	Above	At	Below	Above	Above

Table 7.3 An assessment of the case study children's techno-literacy skills

Case study children's techno-literacy skills

Alice

On the assessment of kindergarten technology capabilities, Alice's scores were above expectations for Kindergarten on all criteria (see Table 7.3). Alice also had sole use of a CD player and used it extensively when dancing and her parents indicated that she 'choreographed her own simple dances'. Despite the fact that Alice did not use the computer frequently, she was capable of using programs on the computer to reinforce her literacy skills (*Fun on Alphabet Farm* CD and *ABC Kids* site) and she also used her reading skills to enjoy some of the programs (*ABC Dinosaur*). Alice used her writing skills on the computer to write letters to friends. She was also confident in using the mouse and typing on the keyboard, although she had to look closely at the letters to find the correct letters to type.

Alice's infrequent use of the computer did not seem to have any adverse effects on Alice's progress with techno-literacies. Her use of technology seemed to impact only in a minimal way on her literacy development while her highly-developed print and paper-based literacy skills assisted Alice in the development of her skills on the computer.

Adam

On the assessment of kindergarten technology capabilities, there was a wide range in Adam's scores because of limited access to a computer at home. Adam's scores, however, were above expectations for Kindergarten on one criterion and at the expected level on five criteria (see Table 7.3). His lower than expected scores on the remaining three criteria would be improved with increased access that Adam will now, hopefully, experience at school. As noted by Hill (2004), children with limited access to computers at home didn't appear to be disadvantaged so long as there was access at school. Once again it can be argued that so long as teachers recognise children's prior–to-school experiences and build on their *'funds of knowledge'*, that they will succeed at school. Despite not having access to a computer at home, prior to school, Adam experienced email and a *'Paint'* program at his grandparents' house, and also experienced eBay with his mother.

Alexandra

On the assessment of kindergarten technology capabilities, Alexandra's scores were below expectations for Kindergarten on all criteria (see Table 7.3). For Alexandra it will be advantageous for her to have access to computers at school, and to have a teacher who can build on her *'funds of knowledge'.* Despite Alexandra's deficit in this area of her literacy learning, she was keen to learn and to improve her skills. In a supportive school environment, she has the potential to succeed in techno-literacies.

Winton

On the assessment of kindergarten technology capabilities, Winton's scores were at or above expectations for Kindergarten on all but one criterion (see Table 7.3). For children like Winton, there is a mismatch between experiences and expectations in technology at school compared to out-of-school experiences in ICT. As Beavis (2002, p49) reports,

> Previous research in this area (Downes 1999, Healey 2000, Moulton 2000) raises questions about the implications of the mismatch between school expectations and definitions of literacy and the kinds of knowledge young children bring for their future development in literacy.

Winton also played with his uncle's Xbox and he had recently been given a Tamagotchi and, as reported previously, Winton had been exposed to the computer from a young age. He was '*fearless on the computer'*, was not afraid to fail and took risks. He preferred to learn from his mistakes than be shown how to do something new. He would often comment, *'I can do it fine'*, meaning he would learn by trial and error.

Winton also showed far more interest in using the computer for learning than using print and paper-based literacies. For children like Winton, it is important in the school setting to build upon his '*funds of knowledge'*, and to channel Winton's potential for learning through computers. This will have far-reaching implications for his success at school.

Jacob

On the assessment of kindergarten technology capabilities, Jacob's scores were at or above expectations for Kindergarten on all but one criterion (see Table 7.3). Jacob had been playing with games on the computer since two years of age and also played on the PlayStation and with his Xbox. He had also watched his father take and make videos. Like Winton, Jacob's learning in technology was above the NSW DET expectations for children in Kindergarten.

Summary: The case study children's techno-literacy skills

It is clear that for all of the children, a program such as 'Best Start' would not have tapped into the *'funds of knowledge'* with respect to their techno-literacy skills. With such a strong emphasis on print and paper-based literacies, mediated through programs like 'Best Start', teachers and parents are also less likely to value the techno-literacy skills these young children have already mastered prior-to-school entry and will subsequently bring with them to the school setting.

English K-6 Syllabus (2007)

The *English K-6 Syllabus* (Board of Studies NSW 2007a) includes the literacy outcomes that the majority of kindergarten children are expected to achieve by the end of their first year at school. These outcomes in talking and listening, reading and writing were outlined in detail in Chapter Four where the NSW DET documents were analysed. In this same chapter, the techno-literacy indicators for each outcome were indicated in bold type. These same indicators have now been listed together below to highlight the extent of the expectations in techno-literacies included in the *English K-6 Syllabus* (Board of Studies NSW 2007a, pp20-46):

- listening and responding to computerised instructions eg. Click on the red square;
- communicating in different ways eg. talking books;
- looking at electronic books;
- recognising computer icons;
- contributing to shared readings of emails;
- talking about meanings in moving images eg. CD-ROMs;
- interpreting symbols eg. computer icons;
- navigating through sections of computer software;

- identifying subject matter in CD-ROMs, electronic books;
- identifying the beginning and end of a TV show;
- recognising conventions in the use of icons and written text in computer software;
- using a programmable keyboard to create simple text;
- using drawing software for scribed texts;
- creating pictures using a drawing program, writing own text or having it scribed;
- contributing to joint email messages; and
- using computers to:
    - experiment with using the mouse and keyboard and other specialised equipment;
    - produce own name;
    - produce some letters other than those in own name;
    - produce commonly used words;
    - move the cursor using the mouse and keyboard and other specialised equipment;
    - associate the pressing of a key with the appearance of a character on the screen;
    - turn the computer on and off;
    - identify the cursor on the screen;
    - recognise letters on the keyboard;
    - use computer software programs to create texts; and,
    - type simple sentences.

This extensive techno-literacy list has been taken from the outcomes in talking and listening, reading and writing included in the *English K-6 Syllabus* (Board of Studies NSW 2007a). With such an extensive list from the syllabus, it is again interesting that none of these skills are included in the Best Start: Kindergarten assessment (NSW DET 2007). Yet, it states on the DET curriculum website (NSW DETCSD 2008) that the *Best Start: Kindergarten assessment* identifies the literacy knowledge and skills that each child brings to school and it uses a continuum that is consistent with the English K-6 Syllabus for the early years of schooling.

It is clearly evident that 'Best Start' does not fulfil either of these claims. If kindergarten children are expected to be competent at all of the skills listed above by

the end of the first year at school, then it would seem obvious that kindergarten children's techno-literacy skills should be assessed on entry to school. For teachers to be able to provide an appropriate curriculum, they first need to assess what children know, and can do, so that they can build on children's previous knowledge.

Interpretive summary

When comparing the multiliterate practices and skills in the homes of the kindergarten children in this inquiry in relation to the expectations, in the first year at school, of current policy and curriculum on the NSW DET, it is clear that the children (irrespective of their background or gender) have come to school with a knowledge of early literacy skills that have been inculcated by a loving and caring family.

Children's early print and paper-based literacy skills are now assessed in the first weeks at school through the assessments in 'Best Start' and relevant teaching and learning programs will be provided that will build on these skills. With feedback to parents from these assessments the message is clear. Schools value the assessed skills, namely print and paper-based literacies. While these skills are important for literacy learning, this study has demonstrated that the focus of the assessments is too narrow. It does not recognise and, therefore, does not value the wide range of learning in that first five years, especially the children's techno-literacy skills.

Comber and Hill (2000) would quickly argue that problems also exist with early testing and subsequent inaccurate labelling, ranking and grouping of children. In the 1998 project '100 Children Go to School' that took place in five socioeconomically and geographically diverse research sites in three Australian states, Comber and Hill (2000, p86) found that,

> Only some children begin schooling with analytical or strategic tools and dispositions which allow them to quickly take up the institutional ethos, culture and pedagogic routines and to focus their attention on new academic learning.

Therefore, some children will be disadvantaged by early testing and results of assessments will not be a true indication of their ability. There are concerns about early testing of children that incorrectly labels them and then ranks them in low ability groups or programs for *'at risk'* students. As argued by Comber and Hill (2000, p88), "early testing programs conducted before school (or on entry to school) may

inaccurately label children or indicate inexperience with school literate practices rather than anything more". The problem with inaccurate labelling of children, is that "once ranked, low-ability students are given instruction different from that given to their high-ranked counterparts" (Collins 2006, p141), and the gap in learning increases not decreases over time. Eder (1979, p13) found that "those who get placed in lower groups at the outset of schooling build up a handicap that becomes ever more difficult to overcome".

What is more important than assessment for young literacy learners in our schools, is "an understanding of the vast range of prior-to-school learning experiences and designing and implementing an early literacy curriculum that builds on the 'funds of knowledge' in local communities" (Comber and Hill 2000, p88). For all children to experience success, especially in those first few weeks at school, "it is the teacher's talk – the particular ways of explaining with clarity and precision, what is to be learnt – that is critical" (Comber and Hill 2000, p86).

It is disappointing that the latest NSW Department of Education and Training (2007) policy, *Best Start: Kindergarten assessment* includes only print and paper-based literacies. Rather than being a document for the future it seems to be a throwback to the past. This is a concern, as argued by Snyder (2002, p8),

> Clearly, educational institutions, clinging to print-based literacy practices, need to rethink the ways in which they function. The print-based industrial model of education needs to be redesigned to take account of the reality that young people are more likely to develop complex literacy repertoires outside educational institutions.

If Snyder's statement was true back in 2002, then it must be even more relevant in young children's lives now in 2008. However, if schools assess only print and paper-based literacies then the message to parents is clear. Kindergarten children's techno-literacy skills are not important or valued in the school setting.

This chapter has discussed the data from this inquiry that explored the multiliterate skills and practices of kindergarten children in their homes and has addressed the research questions. The final chapter, 'Chapter Eight: Future Stories' will explore the implications of the findings for families, teachers of young children and policy makers.

Chapter Eight

Future Stories

Chapter Eight

Future Stories

There is nothing permanent except change.

Heraclitus (Ancient Greece)

Introduction

In Chapter One, I outlined my personal story that led me to this inquiry. My experiences as a kindergarten teacher over many years had raised issues as to why some children entered school more ready to learn to read and write. I was also intrigued and found it difficult to understand why at the end of the kindergarten year some children still experienced difficulties in learning to read and write even though they had similar learning experiences to other children. I wondered also why many girls tended to learn to read and write with greater success than some boys. These experiences and others led me to develop my own personal views about the importance of prior-to-school experiences and how I could best transition children, building bridges to support these young learners as they moved into the learning culture of school.

In more recent years my experiences as a principal have led me to ask what a highly literate citizen 'looks' like especially now when technology is playing an ever-increasing role in not only adults' lives but also the lives of very young children. Therefore, what literacy skills now in the 21st century do we need to teach in our early years' classrooms and what experiences do we need to provide for our young learners that will enable all of our students to develop into highly literate citizens?

These personal views needed to be explored for myself and for my colleagues. Hence this long journey and the stories that have unfolded. The inquiry explored the multiliterate practices in the homes of kindergarten children at three Sydney metropolitan schools. It focused on socioeconomic background and gender and it situated these multiliterate practices within the expectations of current policy and curriculum, in the first year at school, of the New South Wales (NSW) Department of Education and Training (DET).

This final chapter concludes the stories of the children's literacy learning in the first year at school and focuses on the major implication that has arisen from their stories.

The inquiry identified some significant insights in relation to the research questions that have led to the following conclusion and implications.

Valuing Young Children's Multiliterate Learning on Entry to School

An analysis of the data gathered in this inquiry shed information in relation to kindergarten children's multiliterate practices in their homes. While some differences existed across the three schools and in each of the case study children's homes, a clear picture of the range of young children's literacy practices emerged. Furthermore, this range of literacy practices included not only print and paper-based literacies but also techno-literacies.

Findings were consistent with studies by: Luke (1999), who suggests that children's early literacy and play experiences are shaped increasingly by electronic media; and, Downes (2002, p184), who argues that "many kindergarten children enter school with informal competencies and predispositions for learning that have developed from the use of computer technologies in their homes". While this may be happening, it seems neither parents nor teachers of early years' children value these 'competencies and predispositions for learning' very highly.

It also seems that technology in early literacy learning is not valued by our educational policy makers. As recent as 2008, the first NSW DET state-wide assessment of kindergarten children on entry to school commenced and will be phased into all primary schools over the next two years. Titled *Best Start: Kindergarten assessment*, this document was assessed in detail in Chapter Four and there it was noted that, while 'Best Start' assesses literacy and numeracy skills and competencies on entry to school, it does not include any assessments of technology skills or competencies. In literacy, therefore, assessments only include aspects of speaking, writing, reading texts, comprehension, concepts about print, vocabulary, phonics and phonemic awareness.

If we are to accept the views of Labbo and Reinking (1999), Luke (1999), Casey (2000a & 2000b), Street (2001), Snyder (2001b, 2002), Downes (2002) and Cloonan (2005) that literacy is no longer only the domain of print and paper-based material, but now also includes combinations of signs, symbols, pictures, words and sounds, it seems we are doing young children a disservice by not incorporating such competencies into their early literacy education, both in the home and in schools, in assessment, and in teaching and learning programs.

In the following figures (overleaf), the current situation in the first year at school is explained in relation to becoming a highly literate citizen in the 21st century.

Ideal Situation for Developing a Highly Literate Citizen in 21st Century

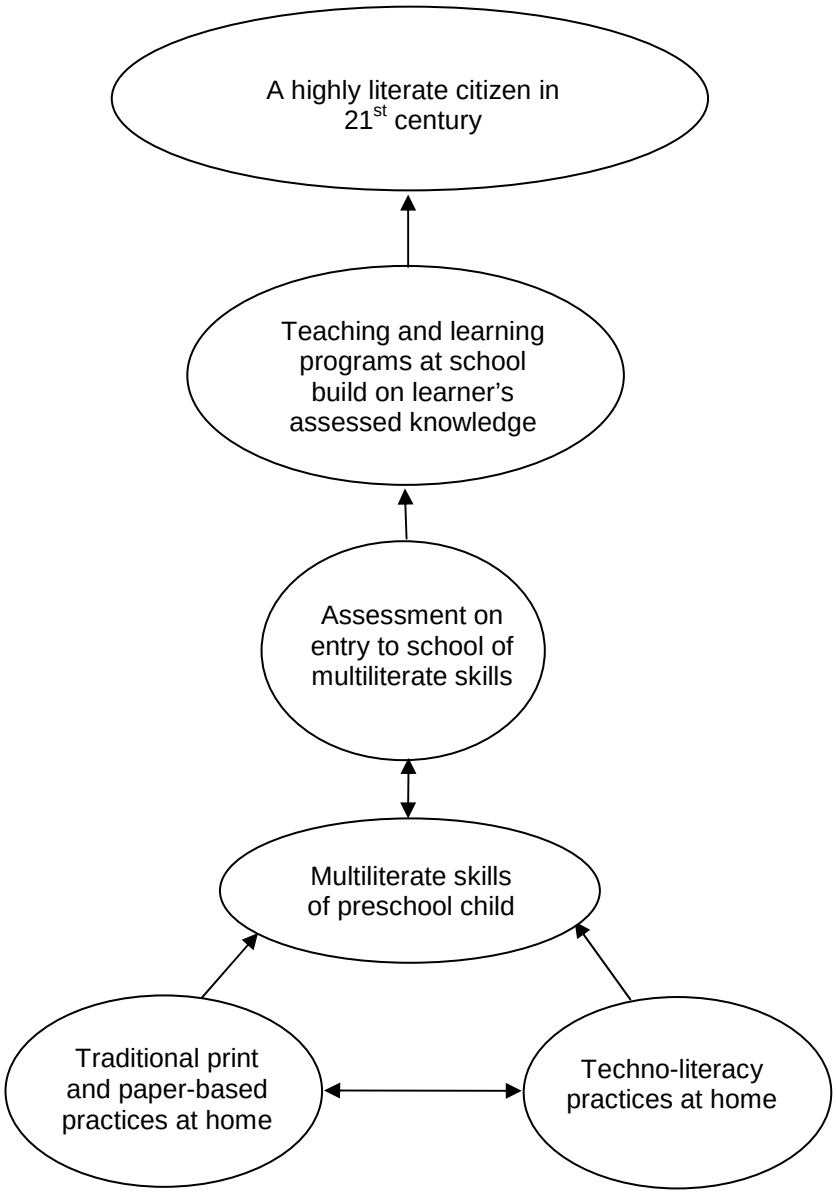

Figure 8.1 Ideal situation for developing a highly literate citizen in 21st century

Figure 8.1 demonstrates that in the homes of kindergarten children, as confirmed by this inquiry, young children experience traditional print and paper-based literacies and also techno-literacies. Therefore, young children's *'funds of knowledge'* on entry to school are multiliterate; they include print and paper-based literacies and techno-literacies. In an ideal situation these multiliterate skills would be assessed on entry to school and then the teaching and learning program in Kindergarten would build on these skills. The assessment of the children's multiliterate skills would enable early years' teachers to '*build bridges'* into school literacy so that learning is engaging and

seamless. In this ideal situation a highly literate citizen prepared for the literacy demands of the 21st century would emerge.

However, the current situation in NSW schools as shown in Figure 8.2 (below) tells a different story.

Current Situation in NSW Schools on Entry to School

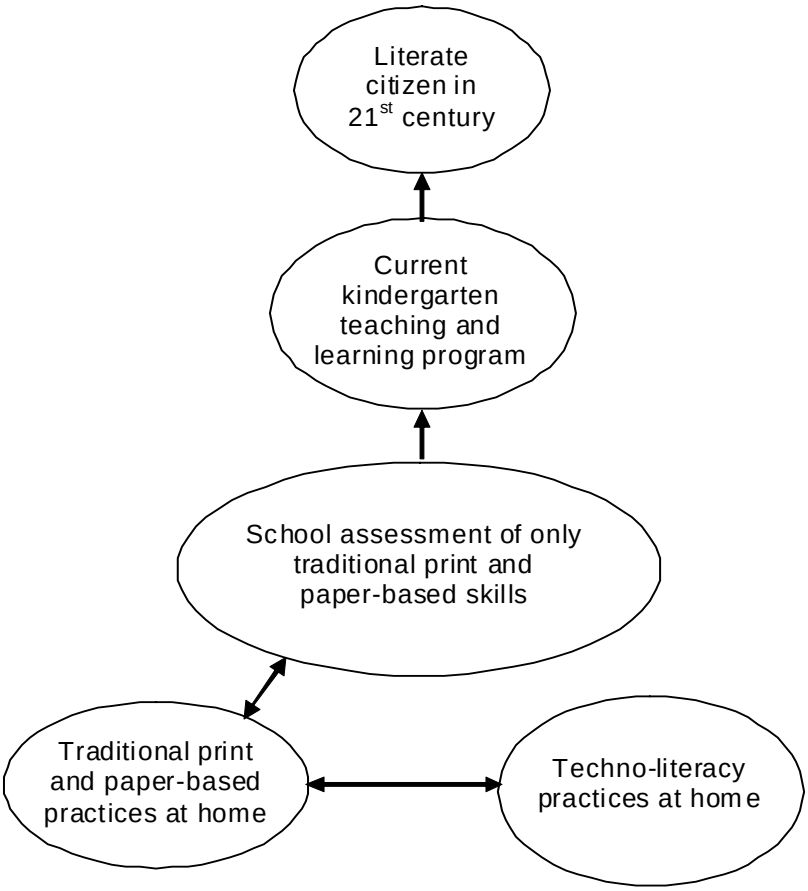

Figure 8.2 Current situation in NSW schools on entry to school

As the arrows indicate, on entry to school, only traditional print and paper-based literacy skills are assessed. Young children enter school with '*funds of technology knowledge'* in their '*schoolbags'*; however, they do not have the opportunity to unpack this learning in the school setting especially in that first year at school. Their techno-literacy practices are not assessed.

This current situation is further explained in Figure 8.3 (overleaf).

Focus of Best Start Kindergarten Assessment

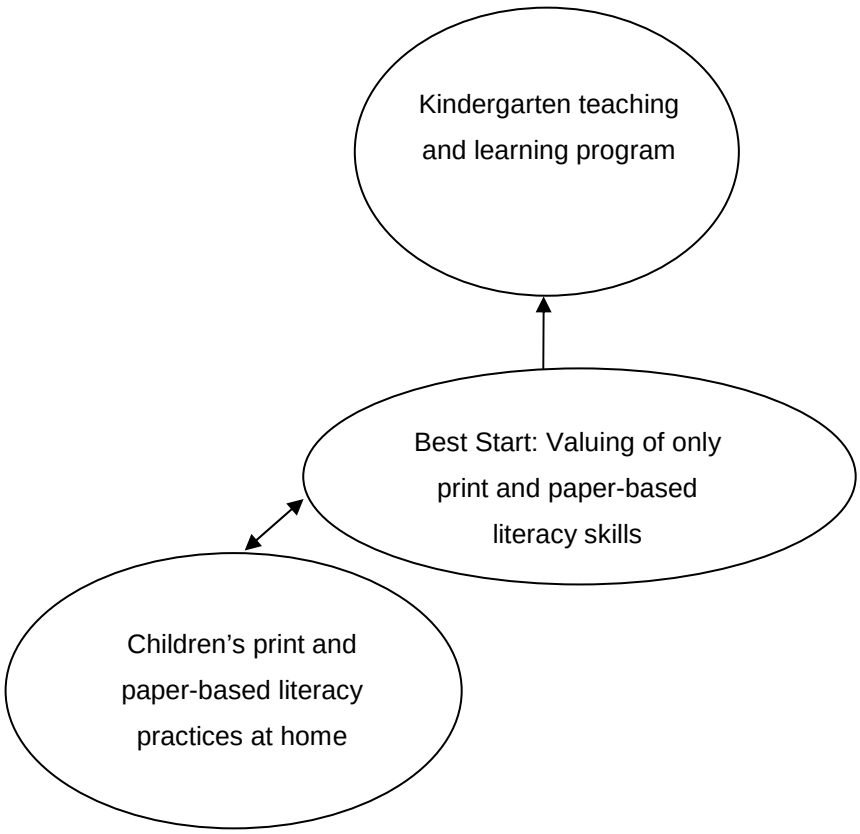

Figure 8.3 Focus of Best Start: Kindergarten Assessment

As the above figure demonstrates, *Best Start: Kindergarten assessment* ignores young children's techno-literacy skills. It only assesses the traditional print and paper-based skills. This situation in kindergarten classrooms, where young children's technology skills are not valued and even ignored could have the potential to *'disengage'* our young learners from the literacy program in the classroom. With their prior-to-school lives encompassing a broad range of technologies, stepping into classrooms that do not acknowledge and build upon these technology skills is creating a school system that is very much out-of-step with these children's out-of-school worlds.

For optimal literacy learning, future research will need to continue to focus on how to best use computers and other technologies in early literacy learning. As Burnett (2002, p142-143) observes,

> Today, the ubiquity of computers is as important as the overwhelming presence of other technologies of communication. This means that educators are caught up in the reality of technology use whether or not they understand the implications. In addition, there is so much experimentation going on to examine the potential, both negative and positive, of technology's role in education, that a mass of assumptions about the issue has become embedded in the social and cultural fabric of society and has become the basis for discussion of classroom issues.

Burnett has stated that whether or not educators understand technology and its implications for future learners and learning, there is a need to recognise that technology is more and more a part of everyone's lives, including the lives of young children. Teachers, especially teachers of very young children, therefore, need to work in partnership with parents, to understand the children's '*funds of technology knowledge'* so that they will be able to provide relevant classroom experiences. In researching how to best use computers and other technologies in early literacy learning, future research will need to focus on what is valid literacy practice.

This study has demonstrated that the literacy practices of kindergarten children in their homes include print and paper-based, and techno-literacy practices. Young children's experiences are extensive and the potential of young learners entering our schools with *'funds of knowledge'* that include techno-literacy practices is high.

Implications

A major implication, therefore, for schools is to '*make ready'* (Comber 1999) and provide a learning environment that will build on this knowledge. Another implication is to take heed of Snyder's (2001a, 2001b, 2002) warning that techno-literacies need to be valued as important components of literacy learning both at home and in school settings. To do so, will require a change in teachers' definitions of what constitutes literacy practices in the early years. As Turbill and Murray (2006, p2) propose, "teachers of early childhood continue to operate within the paradigm that literacy is a set of skills to be mastered, and technology is a tool to be used to master those skills".

Turbill (2001, p256) also reported,

> a group of principals at a conference lamented that in spite of each classroom in their schools having at least one computer, teachers of the early years in particular, were reluctant, even resistant, to the integration of computers into their literacy curriculum.

Similarly, there needs to be a change in current views of parents. This study has demonstrated that young children use technology in their daily home lives and while parents view this as *'useful'*, they still tend to hold the view that learning to read and write using books, pencils and paper is more important than developing techno-literacy practices.

In addition, Makin et al. (1999), McNaught et al. (2000), and Arthur et al. (2001) suggest that pre-school experiences involving multiliterate practices are likely to not only be ignored, but actually devalued in the school setting.

It is apparent that the value of '*reading to your child'* in the home setting has been accepted and practised by the parents in this study. Teachers have been instrumental in espousing this message to parents. Thus, if we are to acknowledge, value and build on the techno-literacy practices that kindergarten children experience in their homes and thus bring to school, it seems we must first begin with the teachers of school entry classes.

While this is happening in some schools, most classroom settings are just not conducive to using computers and other technologies in teaching and learning experiences. As Murray (2000) pointed out, in some classrooms, computers are so close together that the mouse has to be operated by moving it around on top of the computer. This scenario, sadly, is common in many classrooms. Only when teachers are in a position to understand and espouse the synergy between techno-literacy practices and print and paper-based literacies, will parents also begin to acknowledge the value of the many multiliterate practices their young children experience in the home setting.

Furthermore, with computers having been in school settings for over twenty years and new technologies such as iPods and iPhones playing an ever increasing role in the lives of our young children, there is still much to do in our classrooms in order to *'prepare our young children for the future'.*

Our society is becoming increasingly sophisticated and technologically complex. Expectations of policy and curriculum in our schools will need to keep abreast of a fast moving world of technological change, otherwise, future generations will experience a school system that is out-of-step with young children's out-of-school worlds. Our school system and especially that most important first year at school will need to be in-step with young children's out-of-school worlds. Otherwise our young learners could become disengaged and switched-off to learning right from the start.

With the current national commitment to early childhood learning, the Labor government's *New Directions for Early Childhood Education* includes:

- universal right to early learning for all four-year-olds enshrined in a new Commonwealth *Early Childhood Education Act*;
- all four-year-olds entitled to receive fifteen hours of learning per week, for a minimum of forty weeks per year;
- delivery of play-based early learning by a four-year qualified teacher; and,
- a commitment to a National Early Years Learning Framework to ensure consistency of development and learning.

(Rudd & Macklin 2007, p16)

The Commonwealth investment required to implement these new programs to provide universal access to early learning for four-year-olds, alone will cost $450 million per year (Rudd & Macklin 2007).

The National Early Years Learning Framework will prevail over the future stories of our young literacy learners; hopefully this framework as part of the *New Directions for Early Childhood Education* (Rudd & Macklin 2007) and Australia's Education Revolution will heed what all of the research is postulating including the technology learning of our youngest learners and that it will value, assess and build upon this learning and will, therefore, ultimately achieve its aims.

As Labbo (2006, p206) argues,

> Good or bad policies have intentional and unintentional domino effects that result in a chain of events that may lead to better students' scores on print-

> based tests but may also lead to students who are not prepared for their literacy futures.

Postscript

One of the purposes of telling stories is so that we can learn from the past. Riessman (2004, p705) stated that,

> Storytellers interpret the world and experience in it; they sometimes create moral tales – how the world should be.

How should the world be for future generations of young literacy learners? Hopefully we have learnt something from the past, from these stories that have been told, and we will, therefore, create a more equal world where all young children on entry to school will be valued for who they are, and for what they have already learnt in the years before school. Hopefully future young literacy learners will have the opportunity to '*unpack their school bags and the knowledge within'* and that they will cross that *'bridge into school literacy'* that has been built by passionate, knowledgeable, loving and caring teachers.

I will not tell these future stories, however, they will be told.

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Appendix A:

Parent/Caregiver Questionnaire

Parent/Caregiver Questionnaire

Thank you for your support in taking the time to complete this questionnaire. For the purpose of the survey being conducted, **you will need to indicate whether or not your kindergarten child is a boy or girl, so please include this information.** If you have twins in kindergarten you will need to complete a separate questionnaire for each child. If you are unsure of any of the answers, leave them blank. Please return the questionnaire in the enclosed stamped, addressed envelope, at your earliest convenience.

Please circle:

My child in kindergarten is a girl / boy.

1. Storybook reading

Do you read to your child? Yes/No

If you read to your child, in a typical week how often do you read to your child?

At bedtime:

once ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ times ___ more, please estimate

Other times:

once ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ times ___ more, please estimate

If not, why not? _____

_____

_____

Do other family members read to your child? Yes/No

Relationship of family member to child: _____

If yes, in a typical week how often do these family members read to your child?

At bedtime:

once ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ times ___ more, please estimate

Other times:

once ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ times ___ more, please estimate

When you, or other members of the family, read to your child, do you, or they, discuss or name the pictures, talk about meanings of words, focus on the words, tell children the names or sounds of letters, find rhyming words? Yes/No

Circle any of the activities mentioned above that you or other family members do.

Circle how often.

Never Seldom Sometimes Often Very often

Please circle the word that best describes your child's behaviour in a typical week.

My child asks to be read to:	Never	Seldom	Sometimes	Often	Very often
My child attempts to read to him/herself:	Never	Seldom	Sometimes	Often	Very often
My child attempts to read to others:	Never	Seldom	Sometimes	Often	Very often
My child memorises books read to him/her:	Never	Seldom	Sometimes	Often	Very often
My child asks for favourite books to be read?	Never	Seldom	Sometimes	Often	Very often

Please list any favourite books:

_____

_____

_____

_____

Comments: _____

_____

2. Library visits

Please circle the word that best describes you and your child's behaviour.

My child goes to a library:	Never	Seldom	Sometimes	Often	Very often
My child chooses his/her own library books:	Never	Seldom	Sometimes	Often	Very often
I help my child to choose appropriate books:	Never	Seldom	Sometimes	Often	Very often

Comments: _____

_____

3. Child's home library

Does your child have his/her own library? Yes/No

If yes, how many books/magazines/comics are in your child's library?

1-20 ___ 21-40 ___ 41-60 ___ 61-80 ____ more ____ , please estimate

Please list the contents of your child's library.

_____

_____

Where did the contents of your child's library come from? _____

_____

Does your child receive reading materials as gifts? Never Seldom Sometimes Often Very often

Do you buy reading materials as gifts for others? Never Seldom Sometimes Often Very often

Comments: _____

4. Beginning reading

Please estimate how old your child was when:

- you, or other members of the family started reading to him or her? _____
- he/she started pretending to read to him/herself or others? _____

Comments: _____

5. Other reading activities

In a typical week, how often does your child engage in the following, with or without your assistance.

Using a computer, involving reading: Never Seldom Sometimes Often Very often

Reading instructions (eg. for games, recipes, building equipment, other toys, videos, gameboys etc):

Never Seldom Sometimes Often Very often

Reading other material (eg. advertisements, TV programs, comics, newspapers, magazines):

Never Seldom Sometimes Often Very often

Reading signs in the wider community:

Never Seldom Sometimes Often Very often

Comments:_____

6. Writing

In a typical week, how often does your child engage in the following, with or without your assistance.

Writing his/her name:	Never	Seldom	Sometimes	Often	Very often
Writing others' names:	Never	Seldom	Sometimes	Often	Very often
Writing letters of the alphabet, or words:	Never	Seldom	Sometimes	Often	Very often
Writing about events or possessions:	Never	Seldom	Sometimes	Often	Very often
Writing pretend letters to others:	Never	Seldom	Sometimes	Often	Very often
Word processing on the computer:	Never	Seldom	Sometimes	Often	Very often

Comments:_____

_____

7. Writing materials (eg. pencils, crayons, textas, chalk, paper, cardboard, chalkboards)

Are writing materials available in the home?	Never	Seldom	Sometimes	Often	Very often
Does your child ask for writing materials?	Never	Seldom	Sometimes	Often	Very often
Does your child ask for writing materials as gifts?	Never	Seldom	Sometimes	Often	Very often
Do you buy writing materials for your child?	Never	Seldom	Sometimes	Often	Very often
Do you buy writing materials as gifts for others?	Never	Seldom	Sometimes	Often	Very often

Comments: _____

8. Beginning writing

Please estimate how old your child was when:

- he/she asked for, or was provided with writing materials? _____
- he/she started scribbling and/or drawing? _____

Comments: _____

_____

_____

9. Parent teaching

Do you teach your child how to read words? Yes/No

If yes, during a typical week, how often do you teach your child to read words?

Never Seldom Sometimes Often Very often

If not, why not? _____

Do you teach your child how to write letters and/or words? Yes/No

If yes, during a typical week, how often do you teach your child to write letters and/or words?

Never Seldom Sometimes Often Very often

If not, why not? _____

Comments:_____

_____

10. Technology devices

Please indicate whether or not you have the following technological devices in your home and the number of each:

- TV yes/no Number: ____
- Video player yes/no Number: ____
- DVD player yes/no Number: ____
- CD/tape player yes/no Number: ____
- Computer/laptop yes/no Number: ____
- Digital camera yes/no Number: ____
- Video camera yes/no Number: ____
- PDA-personal digital assistant yes/no Number: ____
- MP3 player-music player yes/no Number: ____
- Communication equipment-mobile and home phones yes/no Number: ____

Please list any of the above devices that your child has sole use of:

_____

_____

11. Technology experiences

In a typical week, how often does your child engage in the following, with or without your assistance?

Programs on the computer:	Never	Seldom	Sometimes	Often	Very often
The internet:	Never	Seldom	Sometimes	Often	Very often
Receiving/writing emails:	Never	Seldom	Sometimes	Often	Very often
Talking books on CD or tape:	Never	Seldom	Sometimes	Often	Very often
Multimedia CD-ROMs:	Never	Seldom	Sometimes	Often	Very often
Portable game machines-eg. Nintendo gamecube and gameboy:	Never	Seldom	Sometimes	Often	Very often
TV game machines-eg. Sony playstation, Microsoft XBox	Never	Seldom	Sometimes	Often	Very often

Comments:_____

_____

12. Parent views on technology

What are your views on the value of technology in learning to read and write?

_____

_____

_____

_____

Thank you for all your time. The information provided is greatly appreciated. Please add any further comments in the space below.

Margaret Turner

Doctoral student

University of Wollongong

Further comments:

_____

_____

Appendix B:

Participant Information Sheet

UNIVERSITY OF WOLLONGONG

Research Title: An exploration of kindergarten children's multiliterate practices in their homes.

Researcher's Name: Margaret Turner

PARTICIPANT INFORMATION SHEET

Dear parent/carer

Listed below is information in relation to the enclosed questionnaire that you are invited to complete. The questionnaire takes about 15 minutes to complete and your participation will provide very valuable information, so please read the following information and if you are interested, complete the questionnaire and return it in the stamped, addressed envelope provided.

You can remain anonymous, but you are asked to identify whether your kindergarten child is a boy or a girl.

Research Title:
An exploration of kindergarten children's multiliterate practices in their homes.

Researcher's Name: Margaret Turner

Supervisors' Names: Dr Jan Turbill and Dr Pauline Harris in the Department of Education at the University of Wollongong.

Your participation in this research is voluntary, but if you do decide to participate you are free to withdraw from the research at any time. Your refusal to participate or withdrawal of consent will not affect in any way your treatment by, or your relationship with the Department of Education, or your relationship with the University of Wollongong.

If you have any enquiries about the research, you can contact Margaret Turner on 9528 5444(W); 0407 060 444(m) or Jan Turbill on 4221 4133(W), or if you have any concerns or complaints regarding the way the research is or has been conducted, you

can contact the Complaints Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on 4221 4457.

I have included some information below that you might find helpful.

Multiliterate practices are activities with both paper-based and techno-literacy materials.

Paper-based materials include:

- all books
- letters/postcards
- magazines
- newspapers
- comics
- TV programs
- advertisements
- instructions for games and building equipment
- signs in the community

Techno-literacy materials include:

- TV
- DVD/videos
- CDs/tapes
    - talking books on CD or tape
- computers
    - programs
    - internet
    - email
    - multimedia CD-ROMs
- digital camera
- video camera
- portable game machines-eg. Nintendo gamecube and gameboy
- TV game machines-eg. Sony play station, Microsoft X Box
- PDA-personal digital assistant
- MP3 players-music players
- communication equipment-mobile and home phones

The purpose of this research is to find out more information about the multiliterate practices and skills that kindergarten children bring with them to school, so that teachers will be better able to provide appropriate literacy learning experiences for kindergarten children.

Your participation in this research will give us that information. The information will be analysed in such a way that your identity will be anonymous and the information provided by you will be kept confidential.

The data collected from the questionnaires will be used for the writing of the researcher's thesis only. As well a brief report will be provided to your child's school that will assist the teachers in future literacy planning for kindergarten children.

You also have the opportunity to be part of a case-study to find out even more information about kindergarten children's multiliterate practices in their homes. Once again, your participation is voluntary. If you are interested in being involved in the case-study, you can complete the form at the end of the questionnaire, or you may prefer to contact me on 9528 5444, or 0407 060 444 to find out more information.

Being part of a case-study will involve several visits to your home, but no more than one visit each week, for about half an hour, over approximately four - five weeks. Suitable times for these visits will be negotiated with you, and you are requested to be in attendance during these sessions, as videotapes of your children will be taken for the sole purpose only of this study. During these visits, the researcher will:

- discuss multiliterate activities of your kindergarten child with you;
- observe your kindergarten child, involved in multiliterate activities in your home;
- record discussions with yourself and your child; and
- videotape your child's multiliterate practices in the home for the sole purpose of the researcher's study.

I thank you in anticipation of your participation.
Yours sincerely

Margaret Turner
Researcher

Appendix C:
Self-Nomination Form to participate in Case Studies

SELF-NOMINATION FORM TO PARTICIPATE IN CASE STUDIES

You have the opportunity to be part of a case study to find out even more information about kindergarten children's multiliterate practices in their homes. Once again, your participation is voluntary. If you are interested in being involved in the case study, you can complete this form, or you may prefer to contact me on 9528 5444, or 0407 060 444 to find out more information.

Being part of a case study will involve several visits to your home, but no more than one visit each week, for about half an hour, over approximately four - five weeks. Suitable times for these visits will be negotiated with you. During these visits, I will:

- discuss multiliterate activities of your kindergarten child with you;
- observe your kindergarten child, involved in multiliterate activities in your home;
- record discussions with yourself and your child; and
- videotape your child's multiliterate practices in the home for the sole purpose of the study.

If you would be interested in being part of a case-study, please include your name and phone number on this form and return it with your questionnnaire. You will be contacted only if needed.

Thanks for all your help.

Margaret Turner
Doctoral student
University of Wollongong

Name: _____ Phone: _____

Appendix D:

Information for School Newsletters

Surveys for Parents/Carers of Kindergarten Children

A questionnaire is being sent home today with our newsletter to all parents/carers of kindergarten children.

Your participation is voluntary, but I would encourage you to complete the questionnaire, as the information gained will be most beneficial to our school.

All information is strictly confidential, and for the purpose of the study, you are asked only to identify the gender of your kindergarten child.

After your completion of the questionnaire, please return it to the researcher in the stamped, addressed envelope provided. Do not return the questionnaire to the school.

Your anticipated support is greatly appreciated.

To be included in the parent newsletters the following week.

Surveys for Parents/Carers of Kindergarten Children

Last week questionnaires were distributed to all parents/carers of kindergarten children.

Many thanks to the parents/carers who have already returned these questionnaires to the researcher in the stamped, addressed envelopes provided.

If you have not as yet completed the questionnaire, it would be greatly appreciated if you could return the completed form at your very earliest convenience, so that all of the information can be recorded and analysed.

Thanks, once again, for your support of this project.

Appendix E:

Consent Form for Case Study Parents

UNIVERSITY OF WOLLONGONG

CONSENT FORM FOR CASE-STUDY PARENTS

Research Title: An exploration of kindergarten children's multiliterate practices in their homes.

Researcher's Name: Margaret Turner

I have been given information about 'An exploration of kindergarten children's multiliterate practices in their homes' and discussed the research project with Margaret Turner who is conducting this research as part of a Doctor of Education supervised by Dr Jan Turbill and Dr Pauline Harris in the Department of Education at the University of Wollongong.

I understand that, if I consent to participate in this project I will be asked to:

- discuss multiliterate activities of my kindergarten child with the researcher;
- answer questions about my kindergarten child's multiliterate practices in the home;
- allow the researcher to observe my kindergarten child in my home
- allow the researcher to record discussions with myself and my child; and
- allow the researcher to video my child's multiliterate practices in the home for the sole purpose of the researcher's study.

I have been advised of the potential risks and burdens associated with this research, which include several visits into my home by the researcher and have had an opportunity to ask Margaret Turner any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdrawal of consent will not affect in any way my treatment by, or my relationship with the Department of Education, or my relationship with the University of Wollongong.

If I have any enquiries about the research, I can contact Margaret Turner on 9528 5444(W); 0407 060 444(m) or Jan Turbill on 4221 4133(W), or if I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on 4221 4457.

By signing below I am indicating my consent to participate in the research entitled 'An exploration of kindergarten children's multiliterate practices in their homes', conducted by Margaret Turner as it has been described to me in the information sheet and in discussion with Margaret Turner. I understand that the data collected from my participation will be used for the writing of the researcher's thesis, and I consent for it to be used in that manner.

Name (please print): _____

Signed: _____ Date: _____

Appendix F:

Focused Parent Interview

Focused Interview with Child's Parent/s

Code: _____ Date: _____

Parent's names:

_____

_____

Address:

_____

_____

_____

Phone:

_____

Child's name:

_____

Child's gender:

_____

Age of child at date of interview:

_____

Focused Interview with Child's Parent/s

Code: _____ Date: _____

Family background information (home, work, siblings, significant others, family leisure activities):

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Childs' background information (birth, position in family, health/special needs, experiences prior to school, favourite activities):

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Discuss responses to interview questions. Add details to questionnaire.

_____

_____

_____

_____

_____

Child's experiences learning to read and write:

_____

_____

_____

_____

_____

_____

Any concerns:

_____

_____

_____

Influence of technology in the home:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Influence of technology in child's experiences learning to read and write:

Perceptions of child's progress in reading and writing at school:

Dates and times for observations of child:

Appendix G:

Child Technology Interview

Technology Interview

Name: _____

Code: _____

Date: _____

What do you like doing at home?

_____

_____

_____

What do you like doing at school?

_____

_____

_____

Do you use the computer at home? _____

How often? _____

Does anyone help you? _____

What do you do on the computer at home?

_____

_____

Have you printed anything that you have done at home on the computer?

_____

What other technology do you play with at home?

_____

_____

Do you use the computer at school? _____

How often? _____

Does anyone help you? _____

What do you do on the computer at school?

_____

Have you printed anything you have done at school on the computer?

_____

Please see print copy for Appendix(s) H, I & J.

Appendix K:

Technology Assessment

Technology Assessment

Early Stage 1 (Kindergarten) Technology Capabilities

An Assessment of _____ Technology Skills

Rankings: Below (expected level), At (expected level), Above (expected level)

	Below	*At*	*Above*
Identifies the basic parts of computers and their functions.			
Uses and understands computer terms.			
Experiments with using the computer mouse and keyboard.			
Views and discusses graphics on the screen.			
Experiments with paint or draw software to see how it operates and the effects that can be created.			
Uses computer software programs to create texts.			
Uses drawing software to create pictures for scribed texts.			
Accesses and inserts a picture from a file.			
Understands how the internet can be accessed and used.			