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Lynne (e McKechnie

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OPENING THE "PRESCHOOLERS' DOOR TO LEARNING":
AN ETHNOGRAPHIC STUDY OF THE USE OF PUBLIC LIBRARIES
BY PRESCHOOL GIRLS

by

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Graduate School of Library and Information Science

Submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy

Faculty of Graduate Studies
The University of Western Ontario
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ABSTRACT

This ethnographic field study gathered evidence about the use of public libraries by preschool girls. Thirty girls within three months of their fourth birthdays were tape-recorded and observed during one of their usual visits to their local public libraries with their mothers. During the week following the visits, mothers maintained diaries where they reported incidents involving their daughters' use of library materials and other library-related activities. Follow-up interviews were conducted with mothers to verify and find out more about the behaviour observed during the library visits and reported in the diaries. Visit, diary and interview transcripts and field notes were analyzed and coded for general themes. Vygotsky's developmental theory provided a conceptual framework for the analysis of the context in which learning opportunities arose through the use of library services and materials.

During their library visits, the children participated in activities such as: return and check out of library materials; selection of library materials, including catalogue searches, reader's advisory and reference activities; use of library materials, including shared reading and independent perusal; play; social interaction with others; and library programs. In the week following their library visits the children did the following: talked about libraries; made one or more additional library visits; played library; used the library materials they had borrowed for shared reading, independent perusal, and for sources of the content of their play and topics of conversation with others. Both at the library and at home, the library collections, especially stories,

were the focus of most activities observed in the study.

The use of library services and collections provided many learning opportunities, particularly for learning how libraries work and for acquiring emergent literacy skills. Mothers acted as key players in their daughters' use of public libraries, scaffolding their learning within Vygotsky's zone of proximal development.

The results of this research indicate that public libraries can make an important contribution to the development of reading in young children through the provision of materials. Recommendations are made for improving services to support this learning more effectively.

Keywords: Preschoolers' Door to Learning, public libraries, preschool children, preschool girls, ethnography, naturalistic inquiry, learning, emergent literacy, Vygotsky, zone of proximal development

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CHAPTER ONE - INTRODUCTION

1.1 General overview of the research

The general purpose of my research is to gather evidence about how preschool children use public libraries. While review articles (see Schontz 1982; McKechnie 1991) suggest that more and better research is being conducted in the area of public library services for children, "most academic research related to children's services has focused on the contents of materials produced for children" (Chelton 1987, 474). Very little is known even about basic questions such as: "What do preschoolers do while they visit their public library?" or "How do preschoolers use materials borrowed from their public library?" Recently (see, for example Chelton 1990; Fitzgibbons 1990; Rollock 1988) the more complex question of "What impact does public library service have on children's lives?" has arisen in both the academic and professional literature. Chelton (1990, 55) suggests that the intended impacts of public library service have been understood through intuitive consensus rather than through clear articulation in the professional literature or through empirical research. One important intended outcome, to increase children's opportunities for learning, is reflected in sources such as the American Library Association's roles for public libraries, standards and guidelines for service, recent textbooks and government and library association reports.

Lev Vygotsky's child development theory and Brenda Dervin's sense making theory of information seeking provided the conceptual framework for this study.

Vygotsky (1978) postulated that children learn through social interaction with a more skilled, usually adult, collaborator. Dervin (1992) describes information seeking as a process wherein an individual gets stopped in a situation by an absence of internal sense which she calls a gap and then finds helps to bridge the gap so as to make new sense of the situation. A collaborative adult could be seen as important in helping children to bridge the information gaps they encounter.

As very little is known about the nature or outcome of public library use by preschool children, I used naturalistic research methods in this exploratory study. I audio-taped and observed preschool children during their usual visits to their local public libraries. I asked mothers to keep diaries about the use of library materials and other library-related incidents which occurred in the week following a visit. I analyzed audio-tape transcripts, field notes and diaries to discover general themes (Diesing 1971). I paid particular attention to the nature of the visit to the library, subsequent use of library materials at home, child/parent and child/library staff interaction, and incidents of learning opportunities. I hoped to capture a picture of public library use by preschoolers from the perspective of the children themselves.

Sarah's¹ mother reported the following in her diary:

In afternoon I had to drop off one book at [Site J], and Sarah remembered the study being done yesterday. Wondered if Lynne [Researcher] was there again with red jacket and baby tapes etc. She then remembered mention of being in a book for the study. She wants to know if she is going to be a heroine,

¹ In order to preserve confidentiality pseudonyms are used for all subjects and other individuals mentioned throughout this report. See section 3.9.2.

good/bad character, maybe the mother of family in book.²

Sarah and the other preschool girls who participated are the heroines of this study.

1.2 Public library services and children's learning

Evidence from a number of sources suggests that public libraries see themselves as contributing to children's learning both outside and in support of the formal education system.

1.2.1 ALA Roles

In 1987 the American Library Association sponsored and published *Planning and Role Setting for Public Libraries* (McClure et al. 1987). This document describes eight roles for public libraries. Roles are defined as "profiles of public library service emphases" (ibid., 28). One of the eight roles is:

Preschoolers' Door To Learning

. . . The library encourages young children to develop an interest in reading and learning through services for children, and for parents and children together (ibid., 37).

In conjunction with this planning process, the Public Library Association of the American Library Association has annually collected and published statistics from a

² Except for replacing real names with pseudonyms, excerpts from visit transcripts, interview transcripts, mothers' diaries and other data sources are reproduced exactly as they appear in the ethnographic records unless indicated otherwise. Square brackets, e.g. [xxx], indicate notes that I added to the excerpts. Parentheses, e.g. (xxx), if included in excerpts were part of the original record produced either by the mothers or myself.

large group of public libraries in the United States and Canada.³ In the 1995 report (ALA 1995) 537 of the 816 respondents or 65.8% reported using the roles. Of these 420 or 78.2% listed "Preschoolers' Door To Learning" as either a primary or secondary role.⁴

As part of their Public Library Effectiveness Study, Van House and Childers (1994) reported that both library directors and other professional librarians working in public libraries ranked "Preschooler's Door to Learning" within the top three most important roles for public library service.

D'Elia and Rodger conducted a national telephone survey of over one thousand general American adults (1994) and three hundred community leaders (1995). They asked respondents to identify which of the public library roles they considered to be the most important. Three roles, "Formal Education Support Centre," "Independent Learning Center" and "Preschoolers' Door to Learning" were identified by both

³ The questionnaire used to collect this data was broadly distributed. It was sent to all libraries in Canada and the United States serving populations greater than one hundred thousand, a random group of one hundred libraries serving populations less than one hundred thousand, any library requesting inclusion, as well as to libraries which had participated in earlier attempts to collect broad based data such as that run by the Allen County Public Library or the Urban Libraries Council. Although response rates are not given in the *Public Library Data Statistical Reports*, a search of the 48th edition of *The American Library Directory* (1995) on Dialog indicated that there were 9,966 public libraries in the United States and Canada of which 673 served populations greater than or equal to one hundred thousand. Of the 816 libraries who responded to the ALA statistical questionnaire, 407 served populations of one hundred thousand or more indicating that the response rate appeared to be around 60%.

⁴ Only two other roles, "Popular Materials" and "Reference Library," ranked as high. They were chosen by 501 and 429 libraries respectively. The remaining five roles were selected by only twenty-one to 251 libraries (ALA 1995).

groups as being significantly more important to them.

Clearly, many public libraries, many professional librarians working in public libraries, many members of the general adult public and many community leaders regard "Preschoolers' Door to Learning" as an important role for public library service.

1.2.2 Standards and guidelines

The American Library Association last published standards for children's library services in 1964. Among their six general objectives of public library services to children they included "To encourage lifelong education through the use of public library resources" (ALA 1964, 13).

The Canadian Library Association's *Guidelines for Children's Services* states that:

A child's curiosity is a wonderful gift and answering the hundreds of questions that arise in the course of a child's day is rewarding for parent and child, teacher and student, librarian and patron alike (Gagnon 1989, 10).

The British Columbia Library Association's *Guidelines for Children's Services in Public Libraries in B.C.* includes among its goals "to promote life-long pleasure and learning through the continuing use of the public library" (Cobb 1990, 21).

Planning and the adoption of local, community-based guidelines have tended to replace more global standards. Nonetheless this small sample of prominent and recent works indicates that public libraries have connected themselves to children's learning both historically and currently through the standards they have adopted and to which they continue to refer.

1.2.3 Textbooks

The connection between libraries and children's learning is also reflected in recent textbooks about children's library services. Benne (1991) and Rollock (1988) endorse and cite the ALA roles. Fasick (1991) borrows the purposes developed by Long (1953) which were used in the 1964 ALA standards. Connor asks us to:

Imagine a career where you can help children develop a zest for learning, a lifelong love of reading, and the skills to find the answers in their quest for knowledge (1990, 1).

1.2.4 Government and library association reports

The United States Department of Education's *A Nation at Risk* (National Commission on Excellence in Education 1983), although not dealing specifically with libraries, called for the creation of a "Learning Society." Librarians responded through two special reports, "Realities" (American Library Association Task Force on Excellence in Education 1984) and *Alliance for Excellence* (1984). "Realities" listed its first major premise as "Learning begins before schooling" and stated that:

Libraries contribute to preschool learning in two ways: through the services, programs, and materials that help parents increase their skills and capabilities, and through programs that serve children directly (ALA 1984, 47).

Alliance for Excellence, although dealing mainly with school libraries, included a recommendation "that libraries accept their central role in the Learning Society as valid learning centers" and specifically stated that in public libraries an "advisor should promote love of reading as well as learning readiness among preschool children" (28).

In 1988 the United States Department of Education issued a second significant

report, *Becoming a Nation of Readers* (Binkley 1988), which underlined the importance of reading and the role of parents as children's first teachers. The United States Congress declared 1989 to be the "Year of the Young Reader" (Congress 1988) and the Library of Congress concluded that year with a special symposium titled "Learning Opportunities for Children: Libraries and Their Partners" (Year of the young reader 1990).

"Kids Need Libraries" (Mathews, Flum, and Whitney 1990), a document prepared by representatives of the three divisions of the American Library Association serving youth, identified the public library as providing:

the transition from babyhood into formal learning, the resources for personal information and recreation, and the transition from structured learning into self-determined lifelong learning (ibid., 199-200)

and listed one of ten children's needs as "The desire and ability to become lifelong learners" (ibid., 202). This document was widely distributed.⁵ It provided the basis for the adoption of the "Omnibus Children and Youth Literacy through Libraries Act" as the number one resolution passed by the 1991 White House Conference on Library and Information Services (WHCLIS) (Mathews 1991). At the same time, President George Bush was issuing "America 2000," his government's strategy for improving education. It emphasized that learning is a lifelong process and that "outside our schools we must cultivate communities where learning can happen" (Cooke 1991, 43). ALA (1991) issued "Implementing the National Goals for Education through Library

⁵ "Kids need libraries" was published by all the major American youth library journals in 1990: *Journal of Youth Services in Libraries*, *School Library Journal* and *School Library Media Quarterly*.

Service," a position paper which described what libraries are and could be doing to achieve the goals. Bush specifically related "America 2000" to libraries when he spoke at WHCLIS in November 1991 (Kniffel 1991; Sobol 1991). In March 1994 the Clinton administration adopted "America 2000" and integrated it into federal law, by enacting "Goals 2000: Educate America Act." The first goal listed in this law states that by the year 2000 all children will enter school ready to learn (National Education Goals Committee 1992). As evidenced in the literature (Immroth and Ash-Geisler 1994, 1995; Kunesch and Farley 1994), public libraries continued organizing to determine how they could and would support this goal. The prototype developed by a group of educators and professionals working with young children and subsequently published by ALA (Immroth and Ash-Geisler 1995, 140) suggests "adapting the role of 'Preschoolers' Door to Learning' as a national priority in public libraries" as the first step towards accomplishing this goal.

For the past decade both the American government and the American Library Association have clearly linked libraries and children's learning.

1.2.5 Summary

The prominence given to learning in these documents suggests that it is seen as an important impact of public library services for children. This research assumed that learning is valuable and important in contemporary North American society. The library profession has consistently viewed the fostering of children's learning as an important role of public services for children. The purpose of this study is to investigate the role that the public library may play in the lives of children.

1.3 The general research questions

The foregoing discussion demonstrates the need to describe the use of public libraries and their services by preschool children and to identify and measure the place of those services in preschoolers' lives. Children's learning has been considered as an important outcome of library services for preschoolers.

The general questions this research attempted to answer were:

- a. How do preschool children use public library services?
- b. How do preschool children use public library materials at home?
- c. What is the nature of the interaction between adults (mothers and library staff members) and preschool children while those children are using library services?
- d. Is there any evidence that public library services encourage learning by preschool children?

CHAPTER TWO - BACKGROUND AND CONCEPTUAL FRAMEWORK

2.1 Two important studies

The results of two British studies conducted in the late nineteen seventies were reported in a variety of research publications throughout the nineteen eighties. These two studies have had a strong influence on the development of this work: *Young Children Learning* (Tizard and Hughes 1984) and *The Meaning Makers: Children Learning Language and Using Language to Learn* (Wells 1986). Although neither study asked research questions directly related to the present study, each produced relevant and somewhat unexpected findings about the nature of young children's learning. Both used audio-recordings of children's talk as the main source of their data. This approach allowed exploration of the research questions from the perspective of the children themselves in a manner that was age appropriate and was successful in producing useful data for analysis.

2.1.1 *Young Children Learning*

Tizard and Hughes (1984 and other related work) were initially interested in comparing the language experience of middle and working class four-year-old children at home and at nursery school. Thirty girls within three months of their fourth birthdays were tape-recorded in both settings. The sample was evenly divided between children from working and middle class families. The audio-recordings were transcribed and coded for variables such as the number and length of conversations, reasons children and adults initiated conversations, topics of conversations, amount

and type of joint activity, questions and passages of intellectual search. "The most striking finding in the [first] analysis was that, for the majority of variables considered, home/school differences were very large and social class differences at home were very small or absent" (Tizard et al. 1980, 68).

Tizard and Hughes were surprised to discover that the home provided a very powerful learning environment for all the children in their study.

We found that this learning covered a very wide range of topics, but was especially concerned with the social world. Play, games, stories and even formal 'lessons' provided educational contexts, in the course of which a good deal of general knowledge, as well as early literacy and numeracy skills were transmitted. But the most frequent learning context was that of everyday living. Simply by being around their mothers, talking, arguing and endlessly asking questions, the children were being provided with large amounts of information relevant to growing up in our culture (1984, 249-50).

They attribute this to the low adult-to-child ratio, the close emotional relationship between mother and child, the long shared context which helps the mother understand the child and relate present experiences to past ones, the wide range of activities occurring at home, and the greater potential to embed learning in contexts meaningful to the individual child (ibid., 250-1). Mothers were more available to their children than teachers and were more likely to let the child initiate and direct the conversations.

It is of interest that one of the minor findings of the study was that "both at school and at home the longest conversations tended to occur in the context of story-reading and joint adult-child play, and...the context which provoked the most questions from the children was story-telling" (Tizard et al. 1980, 74).

2.1.2 *The Meaning Makers*

The initial purpose of Wells's work (1986 and other related work), more formally known as the "Bristol Study: Language at Home and at School," was to investigate the acquisition of English as a first language during the preschool years. Wells used a sample of 128 children, evenly divided by age, with half being fifteen months old at the beginning of the study and the other half being thirty-nine months old. One day every three months for two and one half years, eighteen ninety second audio-recordings were made at random intervals to capture naturally occurring conversations in the children's homes. The recordings were transcribed and analyzed linguistically. Wells found a common pattern of language development, great individual variation in the rate of language acquisition and little relationship between rate and sex or social class.

Additional resources allowed the study to continue with half of the younger group, or thirty-two children, until they reached the end of elementary school. The children were assessed several times and the study "found a strong correlation between their pre-school language development and their success in school" (Wells and Wells 1984, 191). Differences in knowledge of literacy and in particular the number of stories read to the children in the preschool years were the best indicators of later success in school.

The Bristol Study, although focusing on language learning, could not ignore the evidence it found about learning in general. Wells describes children as "active and persistent learners," and "compulsive and creative seekers after meaning" (ibid.,

191), who both learn to talk and talk to learn. He found incident after incident of children learning tremendous amounts of information through participating in joint activities with adults, asking questions and incidentally being provided with information by adults (Wells 1986, 53-65). Wells refers to this as collaborative meaning making and underlines the important role of the adult in providing opportunities and motivation for such learning.

2.1.3 Overview

Both of these studies indicate that a huge amount of learning takes place informally through everyday activities during the preschool years, that a significant part of this learning takes place in the context of interaction with an adult, and that evidence of such learning may be found through analysis of children's talk. Both studies compared learning at school with learning at home. Each noted that stories played a role in children's learning. The public library, which sees itself as playing a role in children's learning and which is an important source of books for children, is another agency that could be examined in a similar way.

2.2 **Conceptual framework**

Although both of the studies discussed above referred to theory occasionally (Tizard and Hughes to Jean Piaget and Wells to Jerome Bruner among others), neither had a clearly explicit theoretical framework.

This study arises from and is shaped by two bodies of theory: Brenda Dervin's sense making theory of information seeking and Lev Vygotsky's developmental

theory, especially his concept of the zone of proximal development.

2.2.1 Sense making

Sense making as the term is used by Brenda Dervin "consists of a set of conceptual and theoretical premises and a set of related methodologies for assessing how people make sense of their worlds and how they use information and other resources in the process" (Dervin and Nilan 1986, 20). The core assumption of sense making is that discontinuity is characteristic of the human condition (Dervin 1992). Information is seen as "sense created at a specific moment in time-space by one or more humans" (ibid., 63). Dervin's work on sense making also assumes "that human use of information and information systems needs to be studied from the perspective of the actor, not from the perspective of the observer" (ibid., 64) or from the perspective of the system providing the information. Sense making uses a situation-gap-uses model wherein an individual is seen as getting stopped in a situation by an absence of internal sense, also called a gap, and then finds "helps" to bridge the gap and make new sense of the situation. Sense making studies usually are characterized by open ended interviews of subjects which focus on real experiences.

While the sense making approach has been used in a number of studies related to library and information science (for example, see Dervin 1984), it has not been used with young children, perhaps because of the difficulties inherent in using its core interviewing methods with this group. Yet the sense making model of information seeking seems very consistent with Tizard and Hughes' description of children as learners and Wells' conception of them as active and persistent meaning makers.

Having limited knowledge of the world and relative lack of experience with it, children may be seen as encountering discontinuity very frequently. Sense making theory and its methodologies, altered to account for the special characteristics of the subjects, can help us understand the information seeking and learning behaviour of preschool children in public libraries.

2.2.2 Vygotsky

Lev Vygotsky was a prominent Soviet developmental psychologist. His work, which was produced from 1924 until his death in 1934, was not accessible to North American scholars until fairly recently, first because it was suppressed in the Soviet Union and subsequently because it was not translated into English until the nineteen sixties and nineteen seventies. The general assumptions of Vygotsky's theory are that action creates thought, development results from dialectical processes and that development occurs in historical and cultural contexts (Thomas 1992). Vygotsky's theory, like those of Bruner with his scaffolding and Kaye with his child-as-apprentice, is interactionist (Winter and Goldfield 1991).

To explain the interaction between learning and development, Vygotsky used the theoretical construct of the zone of proximal development which he defined as:

the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky 1978, 86).

Vygotsky held that new cognitive skills are first practised by children in social interaction with a more experienced person until the skill is mastered, internalized and able to be carried out independently. Thus:

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*) (Vygotsky 1978, 57).

Learning is an interactive process wherein the adult guides the child's participation so that the child may function comfortably at a challenging level by providing bridges between what the child knows and needs to know, providing structures to organize the problem solving and gradually transferring responsibility for managing the problem solving to the child (Rogoff and Gardner 1984; Rogoff 1986).

Representative research studies related to the zone of proximal development include Wertsch et al. (1980), who found that children's interaction with their mothers for assistance in puzzle building decreased as the children got older and Rogoff, Ellis and Gardner (1984), who found that mothers tailored the assistance they provided to their children in a grocery store shelf sorting task to the changing perceived needs of their children.

Vygotsky's zone of proximal development is consistent with the joint adult/child nature of the learning situations described by Tizard and Hughes and Wells. Further, the adult collaborator could be seen as an important component in strategies developed by a young child to bridge the information gaps postulated by sense making theory.

2.3 Learning

Although developmental psychologists differ in how they use the term "learning" according to their theoretical framework, there is some agreement that "in

a broad sense, learning can be defined as the process of effecting change in a person's thoughts and observable actions as the result of experience" (Thomas 1990, 235).⁶

Tizard and Hughes initially attempted to use a complex scheme of twenty-eight categories to classify the types of things that they saw children learning. The scheme, which was never made explicit, had to be abandoned and they finally reported their analysis using broad categories such as information about play, domestic and family life and social behaviour (1984, 270). However, what emerged from the qualitative analysis of the transcribed children's talk was a rich picture of learning and information sharing between children and their mothers through everyday activities such as play, games, stories and participation in family life. Paris and Cross (1983) refer to this mastery of common tasks as ordinary learning and assert that it is important because it comprises a large part of the learning that very young children do.

Ordinary learning is not easily studied through the laboratory-based experimental methods most typically used by developmental psychologists, as the tasks it involves are not readily replicated in that environment. Naturalistic methods allow us to observe ordinary learning but preclude the traditional pre-test/post-test approach to assess subjects for the permanent changes in behaviour and thinking described in the general definition of learning given above. Instead, naturalistic studies like those completed by Tizard and Hughes and Wells infer that learning is

⁶ This concurs with definitions found in such standard educational reference tools as the *International Dictionary of Education* (1977), *A Dictionary of Education* (1981) and *The Facts on File Dictionary of Education* (1988).

occurring when they see children actively engaged in conversations and questioning with adults which involve an exchange of information.

For the purposes of this study it will be assumed that children are engaged in learning when they are seeking information that helps them to make sense of discontinuities they encounter. In keeping with Vygotsky, knowledge is viewed as being social, and learning is thought to occur frequently through social interaction with an adult within the child's zone of proximal development. Evidence of such learning may be found in joint child/adult activities which involve conversation, questioning and actions in which the child takes an active role.

2.4 Other related literature

2.4.1 Public libraries and preschool learning

The majority of literature about public libraries and preschool learning consists of professional articles describing library services. For example Foust (1991), Kupetz (1993) and Richards (1984) suggest how traditional library services such as book lending and story times might support development in reading, mathematics and other school curriculum subjects. Rogers and Herrin (1986) report on nursery school style parent/child learning centres established at the Johnson County (Kansas) Public Library.

Using questionnaires, interviews and on-site visits, Greene (1984) studied three early childhood centres established in public libraries. Although neither she nor the centres made any attempt to measure their impact on learning, she did discover that

all three centres had been developed with learning objectives and principles in mind.

A few studies have attempted to correlate public library use with success in school. For example, in an analysis of data from forty-one American states Krashen (1995) found that circulation of public library materials per capita and the number of books per student in school library media centres were both significant predictors of reading comprehension scores. Unfortunately none of these studies focus specifically on preschool use of public libraries and later school achievement.

Smardo (1983) tested the impact of live, film and video story times on the receptive language of preschool children. Children exposed to live and film story times showed significantly higher gains in receptive language development than did children viewing videos and control groups receiving no treatments. Although restricted to a very specific type of learning, Smardo's work is notable because of its rigorous research design.

2.4.2 School libraries

School libraries, with their mandate to support the goals and objectives of the schools in which they are located, have been concerned about the relationship between their services and children's learning. Typically research studies in this area have explored the impact of library services on academic achievement.⁷ This body of literature is not directly relevant to the present study which defines learning more broadly and is interested in preschool rather than school-age children.

⁷ For specific examples of the variety of relevant research see Marchant et al. (1984).

2.4.3 Interests

Individual interests have been viewed as playing a part in motivation to learn. Research in this area has asked questions such as what is the relationship between children's individual interests and their attention, memory or other variables involved in learning (see, for example, Renninger and Wozniak 1985), and what is the process by which interests develop (Cohen 1989). There have also been attempts to inventory specific interests because of their potential to support curriculum (Maduewesi 1982). The public library with its broad collections and services can be seen as at least potentially supportive of any child's interests.

2.4.4 Information seeking behaviour

Literature on the information seeking behaviour of children is quite limited. Some work has been done on information seeking by children to cope with medical procedures (Coty and Ritchie 1984; Melamed 1982; Peterson and Toler 1986). Other work has explored the information research process of high school students (Kuhlthau 1989) and the information needs of ten year old children (Walter 1994). The usefulness of this research to this study is limited by its focus on older children in very specific settings.

In one of the few studies focusing on information seeking, Keislar and Phinney (1973) tested the ability of preschool children to use an information source, a pictorial reference book, to master a task of matching animals with their habitats. The children were unable to do this independently. The results are not surprising as children do not have the metacognitive capability to plan and implement such an information seeking

strategy at this age.

2.4.5 Help seeking behaviour

Work in the field of help seeking as it relates to everyday problem solving in children, although broader in context than this study, is somewhat relevant. This work has described help seeking as a social process consistent with Vygotsky's theory of mental development (Nelson-LeGall et al. 1983). It suggests that preschoolers tend to prefer adults as potential helpers (Edwards and Lewis 1979; Nelson-LeGall et al. 1983). It identifies asking questions as "one of the most common strategies for seeking help" (Nelson-LeGall et al. 1983, 276). Work in this field is consistent with the approach suggested for this study.

2.4.6 Curiosity and question asking

Curiosity, manifested in the exploratory behaviours of perceptual investigation, manipulative exploration and questioning (Henderson 1984a), is regarded as closely related to children's learning and development (Hutt 1970; Nunnally and Lemond 1973; Bradbard and Endsley 1980; Wohlwill 1981). Broadly speaking, novelty seems to arouse curiosity in young children and there are individual differences in the amount and kind of exploratory behaviours that children exhibit (ibid.).

A more recent body of research has looked at the social context of exploration. While the mere presence of an adult or parent has not been influential (Johns and Endsley 1977; Henderson and Moore 1980), sensitive collaborative support by an adult or parent has increased exploratory behaviour in preschoolers (Saxe and Stollak 1971; Zimmerman and Pike 1972; Moore and Bulbulian 1976; Endsley et al. 1979;

Henderson, Charlesworth and Gamradt 1982; Henderson 1984b) including those that test as low curiosity children on scales that assess individual differences in this area (Henderson 1984c). Henderson points out that these results are consistent with Vygotsky's concept of the zone of proximal development (Henderson 1984b, 1984c, 1991).

As both Tizard and Hughes (1984) and Wells (1986) used recorded speech as the data in their studies, they paid particular attention to children's questions as a manifestation of their curiosity and learning. This study will use similar methods. Therefore, close attention will be paid to any questioning behaviour by subjects.

Most of the research on children and questioning has been done from linguistic (questions and language development) or pedagogical (questioning in the classroom) perspectives. A small body of work relates to what James and Seebach call "the pragmatic or communicative functions for which children use their questions" (1982, 2).

Pragmatic questions have been classified in a number of ways (James and Seebach 1982; Moch 1987; Thomas 1988; Tizard et al. 1983). Although different terms are used, these schemes all include challenges, or questions arising from a dispute, as well as curiosity/informational questions, or those arising from a child's need to learn or know. Pragmatic questions are also asked to gather information needed to carry out an activity (Tizard and Hughes 1984), to support conversations (James and Seebach 1982) and for socio-emotional purposes (Moch 1987). While some attention will be paid to all these types of pragmatic questions, this study is

primarily interested in curiosity/informational questions.

2.4.7 Caregiver-child interaction

Both Wells (1986) and Tizard and Hughes (1984) found that parents were effective teachers of their young children. This is reflected in many review articles and monographs (for example see Schaefer 1972; Henderson 1981) in the child development literature and is consistent with Vygotsky's zone of proximal development.

An emerging body of adult-child interaction studies has examined activity within the zone of proximal development. While recognizing that adult instruction and child learning do occur, the emphasis in this work has been on metacognitive skills (especially learning how to learn) and how the adult-child interaction occurs (for example see Freund 1990; Saxe et al. 1984, 1987; Wertsch et al. 1980). For the purposes of this study, it is only important to recognize that adults, particularly parents, facilitate learning. During observation close attention was paid to mother-child and library staff-child interaction.

2.4.8 Emergent literacy

A large body of recent research (see reviews by Mason and Allen 1986; Hall 1987; Shapiro and Doiron 1987; Sulzby and Teale 1991; and Teale and Sulzby 1986) emphasizes that literacy first emerges in early childhood as children "make sense of the way literacy works in their culture" (Hall 1987, vii). Children who read early and well are children who have been read to, have seen others in their family read and have been exposed to general activities involving reading and writing (see, for

example, Durkin 1966; Clark 1976; Morrow 1983; Teale 1982, 1986; Wells 1986). Sharing stories and other books with children has been shown to help them learn vocabulary and other aspects of language (Ari and Gonen 1989; Ninio 1983; Robbins and Ehri 1994; Smardo 1983; Snow and Goldfield 1983), to learn about the conventions of print and book use (Anderson, Teale and Estrada 1980; Clay 1979; Snow 1983; Snow and Ninio 1986), to learn about the nature of written narrative forms (Goodman 1986; Heath 1980; Snow and Goldfield 1981; Wells 1986), and to learn the information contained in stories (Goodsitt et al. 1988; Hayden 1987; Wells 1986). Tizard and Hughes (1984) and Wells (1986) both found that sharing stories at home was a frequent springboard to the collaborative talk that led to learning opportunities for children. Other evidence (Cochran-Smith 1984; Morrow 1988, 1989) suggests that this also occurs when stories are shared in other settings and in small groups.

Exposure to books and other library materials, especially in a situation where the experience is shared with an adult, is clearly related to literacy learning for preschool children.

2.4.9 Overview of other related literature

This overview provides support for the contentions of Tizard and Hughes (1984) and Wells (1986) that evidence of children's learning is likely to be found in the conversations children have with adults, especially the curiosity/information questions that they ask, and in their use of books. It emphasizes the importance of social interaction with more competent people, especially adults, in learning by very

young children. Curiosity/information questions, literacy activities and interaction with adults were attended to carefully during data collection and analysis.

CHAPTER THREE - METHODOLOGY

3.1 Introduction and overview

This study falls within the paradigm of naturalistic inquiry. I used the techniques of field observation, key informant observation and key informant interviewing to collect data.

I audio-recorded and observed thirty girls within three months of their fourth birthdays during one of their ordinary visits with their mothers to one of four public library sites. I asked mothers to maintain a diary in which they recorded incidents that they observed related to the use of library materials and to the library in general during the week following the study visit. I then interviewed mothers to seek verification, expansion and clearer understanding of the observed behaviour of their children.

I analyzed and coded transcripts of the library visits, diaries kept by the mothers, interviews with the mothers, as well as field notes prepared during each interaction with the children and their families, to uncover general themes related to the research questions.

3.2 Naturalistic inquiry

I used naturalistic inquiry for this study. A brief description of this paradigm follows.

3.2.1 Assumptions of naturalistic inquiry

Lincoln and Guba (1985, 36-8) summarize the assumptions, which they call axioms, of the naturalistic paradigm as follows:

- a. realities are multiple, constructed and holistic;
- b. the knower and known are interactive and inseparable;
- c. only time and context bound working hypotheses are possible;
- d. all entities are in a state of mutual simultaneous shaping, so that it is impossible to distinguish causes from effects; and,
- e. inquiry is value bound.

3.2.2 Characteristics of naturalistic inquiry

Given these assumptions, naturalistic inquiry as practised is characterized by:

- a. an emphasis on a natural or field setting (Lincoln and Guba 1985; Mellon 1990; Singleton et al. 1988);
- b. focus on the perspective of the subjects (Marshall and Rossman 1989; Mellon 1990; Singleton et al. 1988; Taylor and Bogdan 1984);
- c. use of a human being as the major instrument for data collection through methods such as observation, interviewing and document analysis (Lincoln and Guba 1985; Singleton et al. 1988; Taylor and Bogdan 1984);
- d. emergent research design (Lincoln and Guba 1985; Patton 1990; Taylor and Bogdan 1984);
- e. purposive sampling (Lincoln and Guba 1985; Patton 1990; Singleton et al. 1988; Strauss and Corbin 1990; Taylor and Bogdan 1985);

- f. inductive data analysis (Glaser and Strauss 1967; Lincoln and Guba 1985; Marshall and Rossman 1989; Taylor and Bogdan 1984);
- g. grounded theory (Lincoln and Guba 1985; Marshall and Rossman 1989; Strauss and Corbin 1990);
- h. descriptive reporting which relies heavily on the subjects' own words and behaviour (Lincoln and Guba 1985; Marshall and Rossman 1989; Taylor and Bogdan 1984); and,
- i. an emphasis on establishing trustworthiness, as opposed to the positivist concepts of validity and reliability, through techniques such as triangulation, testing rival hypotheses, searching for negative cases, and, checking results with subjects (Lincoln and Guba 1985; Lofland and Lofland 1995; Marshall and Rossman 1989; Patton 1990; Taylor and Bogdan 1984).

3.2.3 Suitability of naturalistic inquiry for this study

The naturalistic paradigm provided an appropriate approach for this study. It "can be used to uncover and understand what lies behind any phenomenon about which little is yet known" (Strauss and Corbin 1990, 19). It enables us to see and understand "a setting or an experience through the eyes of its participants" (Mellon 1990, 3). It allows us to obtain a holistic view and investigate the processes associated with a phenomenon (Singleton et al. 1988, 297-298). It "may be used when methodological problems preclude other research strategies - for example, when subjects are unable [young children]...to participate in a formal survey" (Singleton et al. 1988, 298). In summary the naturalistic paradigm provided a way to explore the

research questions about which little is now known, through the eyes of the children themselves, and in a manner which resulted in overall views with rich, thick descriptions of the processes involved.

3.3 Sample

3.3.1 Constraints

In order to facilitate data collection, to reduce the influence of possible confounding variables, to enable comparison with Tizard and Hughes (1984) and to ensure that the sample was not very different from ordinary Canadian families, subjects were required to meet certain criteria.

3.3.1.1 Gender

I included only female subjects in the sample. This helped to control for differences due to gender (Bee 1992; Vasta, Haith, and Miller 1995; Berndt 1992), to increase the likelihood of collecting richer data as girls frequently have better developed language skills than boys in early childhood (Bee 1992; Berk 1991; Berndt 1992), and coincides with the choice made by Tizard and Hughes (1984).

3.3.1.2 Age

Subjects were within three months of their fourth birthdays at the time of the study library visits. As much of the data collection involved audio-recording of the girls' talk, it was necessary that their oral language be well enough developed to be easily understood and to provide information rich raw data. Most children's language meets these requirements by age four (Berndt 1992; Drum 1990). I chose a fairly

narrow age range, six months, in order to reduce differences due to development while still preserving workable parameters for subject recruitment. Tizard and Hughes (1984) also used this age range.

3.3.1.3 Language spoken at home

To limit possible differences due to language and/or culture of origin, I included only children from homes where English was the major language spoken. Recent (1991) Canadian census data indicate that 77.5% (Statistics Canada 1992, Catalogue 95-337, 26) of residents of the province of Ontario and 85.5% (ibid. 254) of the residents of the city where the study was conducted, reported English as their mother tongue.

3.3.1.4 Family characteristics

I examined current (1991) Canadian census data to determine what a "typical" Canadian family is like. Census families⁸ with children living at home were likely to be husband-wife (87%) as opposed to lone-parent (13%) families (Statistics Canada 1992, Catalogue 93-312, 8). The average number of children living in husband-wife families with children was 1.91.⁹ Of husband-wife families with children, 95.1%¹⁰

⁸ See Appendix I for Statistics Canada definitions of census families, husband-wife families and lone-parent families.

⁹ Derived from census data (Statistics Canada 1992. Catalogue No. 93-312, 16) by dividing the total number of never-married sons and daughters at home (7,308,525) by the total number of husband-wife families with never-married sons and/or daughters at home (3,821,610).

¹⁰ Derived from census data (Statistics Canada 1992. Catalogue No. 93-312, 16) by adding up the number of husband-wife families having one (1,384,995), two (1,640,065) or three (608,140) never-married sons and/or daughters at home, and, expressing that total as a percentage of the total number of husband-wife families with

had three or fewer living at home. Except for an additional restriction related to the labour force activity of mothers,¹¹ Tizard and Hughes used similar criteria. They noted, in excluding large and lone parent families, that not only were they small in number but that such families were likely to function differently.

In order to collect data that reflected Canadian society at the time of the study, I restricted the sample to children living in husband-wife families with three or fewer children living at home.

As daughter/mother interaction may differ from daughter/father interaction (Bee 1992; Vasta, Haith, and Miller 1995; Berndt 1992) and because Tizard and Hughes limited their study to girls and their mothers, I chose mothers as the parents to be involved in the study.

3.3.1.5 Library use

The sample included only girls who were library users. For the purposes of this study, I operationally defined library users as those who had visited and used a public library at least once per month during the previous six months.

never-married sons and/or daughters at home (3,821,610).

¹¹ In the late nineteen seventies when Tizard and Hughes conducted their research, only 6% (1984, 25) of British mothers with preschool children worked full time and so were regarded as atypical and excluded from their study. During 1980, 59.9% (Statistics Canada 1993, Catalogue No. 93-324, 10) of Canadian women fifteen years and older participated in the labour force. Of these, 70% worked mostly full time and 30% mostly part time (ibid., 62). Although Statistics Canada does not report the number of women with children under six years old who work mostly full time, this is likely to be a sizable group.

3.3.1.6 Other

Other factors, such as social class of the family and school attendance, were not directly related to the research questions of this study and so I did not consider them during sample selection. However, when such information was readily available, I kept notes to aid in data analysis.

3.3.1.7 Variance between subjects

Variance between subjects in terms of constrained variables is described in Table I. This information represents subjects and their families at the time of the library visit. Several of the families changed over the course of the entire data collection. For example, between library visits and the day of the follow-up interviews, three baby siblings were born.

TABLE I
SUBJECT CHARACTERISTICS - CONSTRAINED VARIABLES

Variable	Value		
Gender	Female	n=30	100.0%
Age in months	Mean = 48.63 (Standard deviation = 2.08) Median = 49 Minimum = 45 Maximum = 51		
Language spoken at home	English	n=30	100.0%
Family structure	Husband-wife family	n=30	100.0%
Number of siblings	Mean = 1.07 (Standard deviation = .69) Median = 1 Minimum = 0 Maximum = 2		
Library visits in the last six months	Twice or more per week	n=6	20.0%
	At least weekly	n=9	30.0%
	At least every two weeks	n=6	20.0%
	At least every three weeks	n=8	26.7%
	At least monthly	n=1	3.3%
	Total	n=30	100.0%

3.3.2 Sample size

Thirty children participated in the study. This number allowed me to collect and analyze some basic, descriptive, quantitative data such as socio-demographic characteristics of the sample. It permitted comparison with Tizard and Hughes (1984), who also used a sample size of thirty. It allows for attrition of subjects in an anticipated, follow-up longitudinal study of the same children. Finally, it surpasses the minimum number of fifteen to twenty cases recommended by many qualitative researchers (see, for example, Kuzel 1992; Miles and Huberman 1994; Sowden and Keeves, 1988).

Generally, a relatively small sample size is important in naturalistic inquiry for keeping the data set manageable. My thirty cases generated over two thousand pages of textual data. Mellon suggests that, as naturalistic researchers are "interested in the range of behaviours found in the group they are studying," they begin small and continue collecting, analyzing and modifying until "the information they are gathering becomes repetitive" (Mellon 1990, 65). This idea of sampling to redundancy is reflected in the work of others including Lincoln and Guba (1985), Patton (1990) and Strauss and Corbin (1990). In this study, although small variations were noted, no major new themes emerged from my data after eighteen to twenty cases. Therefore, for example, an examination of the questions asked of mothers in the follow-up interviews for the final ten cases, reveals no themes that had not been asked about in the first twenty. Had this not been so, I would have increased sample size until redundancy was encountered.

3.3.3 Recruitment of subjects

The study sample combined characteristics of convenience and purposive sampling.

In convenience sampling "the researcher simply selects a requisite number from cases that are conveniently available" (Singleton et al. 1988, 153). In this case, as the data collection process was long (at least one library visit and one interview per subject), families who participated had to be willing to make a fairly substantial time commitment. Most participating families were self identified and had responded to notices requesting subjects for the study.

Babbie (1992, 292) defines a purposive sample as one in which "you select a sample of observations you believe will yield the most comprehensive understanding of your subject of study." With this goal in mind, I asked library staff, because of their expert opinion and experience working with specific children and their families, to identify and share information about the study with prospective subjects who would represent as varied a range of library visit behaviours as possible. I recruited subjects in roughly equal numbers (seven or eight subjects) from four diverse library sites.

Strategies used to recruit subjects and the number of participating subjects initially recruited through each were:

- a. fliers and/or posters were displayed and distributed through the libraries at circulation and reference desks, during preschool programs, and during other on-site programs for preschoolers offered by other agencies (thirteen subjects);
- b. fliers and/or posters were displayed in the library school at the university, and

- were distributed to other agencies serving preschool children through the city and especially in the communities served by the sites of the study (three subjects);
- c. notices were placed in the library school's weekly newsletter and local community newspapers (one subject);
 - d. paid advertisements were placed in the university's weekly newspaper and a weekly city-wide advertising publication (six subjects);
 - e. the beginning of story times at two of the sites were attended to briefly address parents about the study (one subject); and
 - f. friends and acquaintances (three subjects), library staff (two subjects) and the mothers of subjects (one subject) were asked if they knew anyone who might have been willing to participate.

Samples of advertising materials are included in Appendix II.

3.3.4 Description of participants

Basic socio-demographic information was collected about the subjects and their families by means of a brief questionnaire administered to the mothers at the end of the follow-up interview (see Appendix VI). These data are presented in Table II, along with comparable general population data, derived from Statistics Canada 1991 Census information. The data have been analyzed to identify similarities and differences between the study sample and the general population.

Transferability, a concept within naturalistic inquiry which is loosely equivalent to external validity, refers to how well the findings of a study can be

transferred to another context (Lincoln and Guba 1985; Erlandson et al. 1993; Miles and Huberman 1995)). The socio-demographic characteristics of the sample are summarized here "to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility" (Lincoln and Guba 1985, 316).

TABLE II - A
SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS¹²

Characteristic	Sample	Canada	Ontario	Study City
Total family Income ¹³ (Sample n = 27) Mean Standard error Median	\$57,148	\$54,667	\$60,846	\$59,039
	4,567	37	72	332
	55,000	48,091	53,217	51,578
Dwelling Type (Sample n = 30) Single-detached Semi-detached Row Apartment	No.	%	%	%
	24	80.0	57.6	48.8
	0	0.0	6.2	4.3
	4	13.3	6.0	11.0
	2	6.7	29.2	35.4
Dwelling Tenure (Sample n = 30) Own Rent	No.	%	%	%
	24	80.0	63.7	53.6
	6	20.0	36.2	46.4

¹² Data in Tables II A - D concerning Canada, Ontario and the study city were derived from Statistics Canada Census 1991 reports, Catalogue numbers 93-324, 93-327, 93-328, 93-331, 95-337 and 95-347.

¹³ This variable refers to the total income of husband-wife type families. Definitions of variable names used by Statistics Canada and adopted and reported in this study, are included in Appendix 1.

TABLE II - B
SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS

Characteristic	Sample (Mothers)		Canada	Ontario	Study City
	No.	%			
Labour Force Activity - Women (Sample n = 30)					
Not in labour force	12	40.0	37.5	35.0	35.8
Mostly full time ¹⁴	7	23.3	44.0	46.1	
Mostly part time	11	36.7	18.5	18.9	
Part or full time	18	60.0	62.5	65.0	64.2
Occupation - Women ¹⁵ (Sample n = 18)					
Managerial	1	5.6	10.2	11.9	10.5
Natural sciences / Social sciences / Religion / Artistic	5	27.8	6.6	7.2	6.4
Teaching	4	22.2	6.3	6.2	6.7
Medicine / Health	1	5.6	9.0	8.4	11.2
Clerical	3	16.7	31.6	31.6	29.7
Sales	3	16.7	9.4	9.5	10.0
Service	1	5.6	16.0	14.0	14.9

¹⁴ Statistics Canada defines full time work as thirty hours or more per week (Statistics Canada. 199 Census Dictionary. Catalogue No. 92-301 e, 58).

¹⁵ For full definitions and explanations of these broad categories please refer to Statistics Canada 1993, "Appendix 3. 1980 Standard Occupational Classification," *Occupation: The Nation*, Catalogue No. 93-327, 270-81.

TABLE II - C
SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS

Characteristic	Sample (Fathers)		Canada	Ontario	Study City
	No.	%			
Labour Force Activity - Men (Sample n =30)					
Not in labour force	1	3.3	21.9	20.5	22.1
Mostly full time	27	90.0	68.7	69.8	
Mostly part time	2	6.7	9.4	9.7	
Part or full time	29	96.7	78.1	79.5	77.9
Occupation - Men (Sample n =29)					
Managerial	2	6.9	13.9	15.5	14.3
Natural sciences / Social sciences / Religion / Artistic	5	17.2	9.6	10.2	9.0
Teaching	6	20.7	2.9	2.8	4.0
Medicine / Health	3	10.3	1.9	1.8	2.9
Clerical	1	3.5	7.1	8.2	8.0
Sales	1	3.5	9.0	8.9	9.7
Service	3	10.3	10.1	9.6	10.8
Machining / Product fabrication	4	13.8	12.0	12.9	13.1
Construction	3	10.3	10.5	9.8	9.4
Transport equipment operating	1	3.5	5.9	5.4	5.4

TABLE II - D
SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS

Characteristic	Sample		Canada	Ontario
	No.	%		
Education - Women (Sample n=30) Highest level completed: Secondary school Incomplete Complete Non-university post-secondary school Incomplete Complete University Incomplete Complete				
	0	0.0	24.5	24.9
	2	6.7	19.1	19.3
	1	3.3	7.0	7.1
	9	30.0	15.7	16.0
	4	13.3	4.2	4.8
	14	46.7	15.4	15.9
Education - Men (Sample n=30) Highest level completed: Secondary school Incomplete Complete Non-university post-secondary school Incomplete Complete University Incomplete Complete	No.	%	%	%
	3	10.0	24.2	24.9
	3	10.0	18.4	18.6
	1	3.3	6.0	5.9
	9	30.0	15.9	15.8
	1	3.3	4.6	5.2
	13	43.3	17.4	18.6

As sample and population sizes were vastly disparate, I did not do a statistical analysis for significant differences. A general examination of the data suggests that the sample was both similar to and different from the general populations of Canada, Ontario and the study city. Total income of study families seemed to be comparable to that of the general population. Study families seemed more likely to be owners of single family detached houses. While the overall labour force activity of mothers was roughly the same as the general population, more of the study mothers worked part-time. Study fathers tended to have higher rates of labour force activity, especially full-time employment. The work patterns of the mothers and fathers may be related to the presence of preschool children in the study families. Statistics Canada does not report data about the general population which would allow comparison.

Both mothers and fathers tended to have higher levels of education than the general population, especially in terms of completion of a community college diploma or a university degree. While the data on occupation were not as clear, there seemed to be a small tendency towards higher representation of professional and white collar work. These differences are not surprising as they are consistent with general findings about the demographic characteristics of public library users in North America (Berelson 1949; Knight and Nourse, 1969; Zweizig and Dervin 1977; D'Elia 1980; Lange 1988).

Overall, the socio-demographic characteristics of the subjects do not suggest that they differ in an extreme way from members of the general population who are public library users.

3.4 Site selection

The following description reflects conditions at or near the time of data collection (April 1994 - February 1995). This study was conducted in a large, Ontario urban centre with a population of approximately 316,000. The city had a public library system which consisted of a central library and fifteen neighbourhood branches. Individual locations varied considerably in size and level of service but all offered at least some services for children. The ALA role of "Preschooler's Door to Learning" was accepted by the Board of this library as a secondary service role in 1989. While this study might have been stronger if sites had been chosen from more than one public library system, limitations of resources (chiefly time) and access made this impractical.

Permission to conduct the study was given by the Chief Executive Officer of the library. The Directors of central and branch library services and the Heads of the sites involved agreed to participate.

I chose four sites as locations for the study. All met the criteria established by this library system as full service locations for children in that they each had at least one full time professional librarian working in the area of children's services, were open to the public for at least fifty-six hours and five days per week and had a minimum total staff of five full time equivalents. Therefore, preschoolers who used these library locations had at least theoretical access to what this system considered to be an acceptable level of service for them.

All four sites served communities that included groups of children who met the sampling criteria, a tactic which facilitated sample recruitment. I excluded one branch serving a community where many children spoke a language other than English at home because I felt that it would be harder to find suitable subjects. Other factors supporting recruitment of subjects taken into account were the presence of a community newspaper and cooperation with other agencies serving preschoolers by providing space for their programming on site.

In keeping with the strategies of purposive sampling, after eliminating locations that did not provide full services for children and did not serve communities where large numbers of potential subjects lived, I considered the remaining sites for inclusion on the basis of their ability to provide the broadest range of data of interest to this study. It seemed important to include the central children's library as this was the only location in the system where all library services are directed to children. The locations varied considerably in terms of type of physical plant, encompassing library-owned, stand-alone buildings and rented facilities in strip plazas and malls. The size of full service locations ranged from approximately four thousand to twelve thousand square feet. Level of business as represented by attendance, circulation, reference question and program attendance output measures also differed between locations. For this study I chose four sites to represent as much of this variety as possible in order to support the collection of information rich data in relation to the research questions. Individual site characteristics are summarized in Table III.

TABLE III - SITE SUMMARY¹⁶

Characteristic	Site C	Site E	Site J	Site S
Type of Library	Central Childrens'	Branch	Branch	Branch
Population served (1994)	316,000	29,000	31,000	22,000
Community newspaper	No	Yes	Yes	No
On-site programs by another agency serving preschoolers	No	Yes	Yes	No
Open				
Hours per week	68	56	56	56
Days per week	6	5	5	5
Number of staff				
Total FTEs	6.5	5.0	6.0	5.0
Professional children's librarians	3.0	1.0	1.0	1.0
Building				
Type	Stand alone	Strip plaza	Stand alone	Mall
Number of square feet	3,645	5,868	11,200	4,500
1994 Attendance	142,301	174,974	254,766	257,840
1994 Circulation	148,164	230,147	356,845	242,810
1994 Reference questions	12,794	40,084	59,690	20,902
1994 Program attendance	12,082	9,951	27,288	7,871

¹⁶ Sources: Study Library. "Statistical Report for the Month of December 1994." Profiles of the study library's service outlets, 1994. Interview with the Director - Planning/Research, Study Library, 24 August 1993.

3.5 Data collection methods

The two major methods used in naturalistic inquiry are observation and in-depth interviewing (Lofland and Lofland 1995; Marshall and Rossman 1989; Mellon, 1990). Many sources on studying very young children (see, for example Boehm and Weinberg 1987; Garbarino and Stott 1989; Touliatos and Compton 1983; Yarrow, 1960) agree that, "because of its dependence on language, motivation, and interpersonal relationships, the interview is not generally used with children under six years" (Touliatos and Compton 1983, 189). However, Singleton et al. (1988, 196) point out that anything "that allows the researcher to obtain firsthand information and to get close to the subjects being studied...is likely to find its way into field research."

I used several methods to collect data:

- audio-recordings of the children's talk during library visits;
- observation of the children's behaviour during library visits;
- diaries completed by the mothers at home during the week following the library visits; and
- diary-interviews with mothers.

The first two approaches were particularly important because they allowed me to study the children's experiences firsthand and from their own perspective by using their own words and actions as evidence. The last two approaches allowed me to gather data about the children's relevant behaviour outside of the library setting.

3.5.1 Audio-recordings of the children's talk

My study used a technique developed and described by Tizard and Hughes (Hughes et al. 1979). To record their subjects' talk at home and at nursery school, they attached a radio microphone to a special garment worn by the girls over their clothing. Receiving and recording equipment was placed in the locations where data were collected. The conversations recorded were transcribed verbatim. An observer, who was present during the taping sessions, edited the transcripts for errors and added contextual notes to them. Tizard and Hughes encountered few problems. They obtained satisfactory technical results, with less than two percent of utterances being unintelligible. There was little resistance to wearing the garment. The observer was able to document manually talk and behaviour on occasions when a child would briefly remove the garment.

I used fundamentally similar audio-recording procedures for this study. I placed a small, high quality digital microcassette recorder (Sony Scoopman NT - 1 Digital Micro Recorder) in a quilted pocket sewn into the back of a hooded fleece shirt. The microphone was housed in a smaller quilted pocket situated below the front neck opening of the shirt. To avoid injury to the children and prevent the equipment from coming loose, I used wide masking tape to fasten down the microphone. The children wore these shirts over their clothing. During the summer months, when the shirts were too warm to wear, the equipment was placed in a fanny belt that the children wore around their waists.

The quality of the recordings was exceptionally high with less than one percent

of the children's speech being unintelligible. The range of the recorder was approximately twenty feet. Therefore it successfully captured other talk and background noises such as the sounds associated with playing with toys.

I encountered a few problems with the equipment but none that were not quite easily overcome. Some of my subjects were extremely physically active and inadvertently turned the equipment off by bumping it as they climbed, crawled and somersaulted through the library. This affected three of the early visits. When data loss was restricted to a few minutes (five minutes or less in two cases) that were well documented in the field notes and not a large or significant portion of the visit, I simply noted this limitation and retained the data. In one case, where almost all of the visit was lost, I carried out a second data collection. The solution which completely solved this problem was to encase the recorder in a sheath of thick corrugated cardboard.

Although most of the children seemed to have no major problems with the recording procedures, some did not like wearing either the shirt or the fanny belt. To help the children feel comfortable, I introduced the equipment to them at the preliminary informed consent interview (see section 3.9.1), allowing them to handle it, operate it and try it on. To increase their sense of control, I offered them the choice of either a red or a blue shirt. I also allowed them to determine how the shirt would be put on. Some chose to do this independently, some sought assistance from their mothers and others wanted me to help. Despite these precautions, three of the children asked to have the equipment removed part way through the library visit.

Usually this was easily resolved. Mothers cooperated by negotiating consent to continue and keeping the shirt near the child. The high quality and recording range of the equipment insured that the data were captured.

Researcher error also resulted in the loss of some data. Once I failed to start the recorder after turning a tape part way through a visit. Luckily the family agreed to a second visit. Although I wore an alarm watch that alerted me to the need to turn or change the tape in the recorder, I twice lost a few minutes of data because I did not turn the tape in time. In both cases the loss was minimal and the behaviour was well documented in the field notes so the data, with this limitation noted, were retained.

Subject behaviour also caused some data to be lost. After the study visit was over and the equipment turned off, a few of the mothers and children resumed their visit. This resumption never lasted longer than a minute or two. It involved activities such as returning to the library to retrieve a forgotten item, to borrow something that was suddenly recalled as being needed such as a book for an older sibling, to visit the washroom, or to greet an acquaintance not noticed before - all things that seemed quite ordinary and not at all unexpected. Although I do not have audio-recordings of these small portions of visits, I documented them in my field notes.

3.5.2 Observation of the children's behaviour

I adopted the role of an unobtrusive observer, and carefully observed the behaviour of both the child and mother during their visit to the library. This reduced the impact of unequal status between the observer and the observed, an inequality inherent in studies of children because of the natural authority adults have over them

(Fine and Glassner 1979; Fine and Sandstrom 1988).

I took the role of a student (see section 3.9.1.3). This allowed me to record field notes while observing, as it would be natural to see a student making notes while in the library. As note taking during observation is believed to increase observer effect (Lofland and Lofland 1995; Spradley 1980; Taylor and Bogdan 1984), I was prepared to defer the preparation of field notes until immediately after the study visit if it seemed to affect a subject's behaviour, a precaution that turned out to be unnecessary. The children exhibited very little behaviour, such as asking repeated questions about the note taking, that would have indicated that note taking was interfering with the observation.

In keeping with the recommendations of Lofland and Lofland (1995), Mellon (1990), Patton (1990), Spradley (1980) and Taylor and Bogdan (1984), the field notes included:

- a. observation notes or a chronological, non-interpretive description of the events, settings and people as they were encountered with notations of time and duration and sketches of the locale;
- b. method notes or a record of the techniques used and the reactions, impressions and feelings of the observer; and,
- c. theory notes or emergent analytic ideas.

Coupled with the audio-recordings, the field notes provided a comprehensive ethnographic record of the library visits. They were used both to provide context for the recordings and also as sources of data themselves.

3.5.3 Diary: Diary-interviews with mothers

The diary: diary-interview method was developed by Zimmerman and Wieder (1977) to collect ethnographic data when participant observation was not possible because of questions of access, observer effect and time/resource constraints. Informants are asked to maintain a diary "or annotated chronological record...over some specified period of time according to a set of instructions" (ibid., 481). The diary is then used to generate an interview. The interview serves to "expand the reportage" included in the diary but also to question "the less directly observable features of the events recorded, of their meanings, their propriety, typicality, connection with other events, and so on" (ibid., 484). In keeping with the general character of ethnographic interviewing, interview guides change as the evidence collected in earlier interviews directs subsequent ones more specifically (Lofland and Lofland 1995, 78).

I chose the diary: diary-interview method for this study because it allowed evidence to be collected about the use of library materials and the impact of the library visit as it was manifested in the child's life in general. A limitation of this approach was that it did not provide data as directly from the child's own perspective as did the audio-recording and observation portions of the study, but relied on the mother to observe, interpret and report on the child's behaviour. The technique of observation by the researcher in the child's home was rejected as impractical because of the difficulty of finding subjects who would have agreed to have a stranger observe their family life for several days or more. Further, the presence of an observer would

alter normal behaviour.

3.6 Data collection steps

3.6.1 Preliminary activities

3.6.1.1 Site visits

I visited each of the four sites where the study took place. I prepared a physical inventory of the site, including a floorplan and a description of the facility. The floorplans were reproduced and used as aids in recording draft field notes during the library visits. I prepared a social inventory of the library staff, including a list of all staff members and their broad duties. I met with staff to explain the general purpose and procedures of the research and to enlist their support in recruiting suitable subjects.

3.6.1.2 Screening interviews

I conducted initial screening telephone interviews with the mothers of potential subjects to ensure that their children met the sampling criteria, to ensure that they understood the commitment they were making in terms of time required and conditions of the study, and to answer their questions. An Initial Contact Summary Form (see Appendix III) was used to document this process.

3.6.1.3 Initial meetings with subjects

I met informally with each mother/child pair once before data collection began. I travelled to whatever location was the most convenient for the potential subjects. While most of the meetings took place in the children's homes, I also met a

few families at the library site where the study visit would occur. At this meeting I explained the general purpose and procedures of the research, sought informed consent from both parties, familiarized both the mother and the child with me and the equipment, gave the child an opportunity to observe me in a non threatening environment, and scheduled further data gathering sessions. I prepared thirty-seven pages of field notes, or about one page per case, to document what happened during these meetings. The field notes included a description of the settings where the initial meetings took place.

3.6.2 Library visits

Children were tape-recorded and observed during one of their ordinary visits to the public library with their mothers. Before each visit I called library staff to inform them of the date and time. I arrived at the data collection sites at least half an hour early. Not only did this ensure that I got there before the family, but I was also able to use this time to make a list of staff who were present, to note any special activities like a library program which might take place during the visit, to recheck the equipment, to post signs to alert other library users about the data collection and to check that information sheets about the study were available.

In most cases I met the family at the front entrance. The child put on the study shirt. I reminded both the child and the mother that they should do whatever they usually did when they came to the library. Tape-recording and observation occurred all the while the mother and child remained in the library. When visits lasted longer than forty-five minutes, I interrupted the child briefly to turn or change a tape. The

library visit ended either when the family left the library or when they came over to me to tell me that they were done. I noted the times that the visit started and ended. I made a list of all library materials borrowed for use at home. I gave the mothers the notebooks they were to use to record library-related incidents in the week following the study visit.

I made verbatim transcripts of all tapes. The transcripts were selective in that portions of the recorded talk which were not relevant to the research questions were summarized as observation notes within square brackets. Typical examples of this include [X and her mother used the public washroom] or [X and her mother talked about what they would do that afternoon]. Conversations of other library users which were captured on the recording were summarized rather than transcribed unless they were directly relevant to the study.

The number of pages per visit transcript varied from seven to fifty-nine, with an average of about twenty-one and a total of 643 pages. Draft visit field notes totalled 287 pages or about ten per visit. The actual audio-recordings are archived on thirty-one, ninety minute cassettes or approximately one per case.

3.6.3 Diaries

At the end of the library visits I gave the mothers a notebook. I asked them to watch for and record any incidents involving their children which were related to the library or the use of library materials. Mothers were asked to maintain these notebooks, or diaries, for one full week following the study visit. Although the loan period for the library system where the study was conducted was three weeks and

library materials borrowed by the girls may have been used throughout this time, the one week period was chosen because it is difficult for subjects to maintain diaries for longer than one week (Zimmerman and Wieder 1977). The specific instructions given to the mothers are attached as Appendix IV.

One mother, who told me she was rather disorganized and messy, lost her diary. Another diary was accidentally destroyed by a father. Both of these mothers were asked to recall and report on post-visit incidents during the follow-up interviews. These data are less trustworthy because they are more likely to be incomplete or inaccurate. Nevertheless I was reluctant to discard the cases entirely precisely because of the variations in behaviour represented by these two families.

Most of the mothers (85.7% of the twenty-eight who kept the diaries) were able to maintain the diary for at least the full week. Entry dates varied from two to twenty-three days after the library visit (median = 7 days; mean = 7.6 days). I noticed that entries tended to get shorter as the post-visit time increased, which is consistent with Zimmerman and Wieder (1977). Mothers used a variety of methods to maintain the diary. Some noted incidents as they occurred. Others tried to find one time, usually at the end of the day after their children were in bed, to record the day's happenings. Some were able to do it only every second or third day. Changes in writing instrument indicate that all mothers made notes more than once during the week. Most of the mothers (85.7%) reported that they felt they had recorded most or all of the incidents they observed. The four mothers who were not sure they had been able to do this explained that illness, tiredness or not always being around may have

caused them to miss some incidents. One mother told me that although she thought she captured everything she had some difficulty with writing because this was not a common activity in her life at that time. Another mother, who is a practising children's librarian, felt she had some difficulty sorting out incidents related to library use from those associated with their general use of children's literature. Some of the mothers, because of related experience in child observation, research, journal writing or case note keeping, were excellent observers/recorders. While it is likely that there is error in the diary transcripts associated with under reporting, and great variance in the quality of the diaries, I have little reason to believe that the mothers did not try their best to record everything they saw or that they deliberately misrepresented events. Altogether twenty-eight mothers completed 130 diary pages or about five per case.

3.6.4 Follow-up interviews

A six part interview was conducted with the mothers after they had had time to complete their at-home observation and recording of library-related behaviour. To optimize recall, I made an effort to do these interviews during the second week following the library visit. This was not always possible because of busy schedules, illnesses and other intervening factors. Twenty-six of the interviews (86%) were conducted within one month of library visits. Most of these interviews took place in the families' homes. A few occurred in libraries and one in a mother's workplace. Usually the child was present during the interview. The interview guide is attached as Appendix V.

3.6.4.1 Observer effect questions

Mothers were asked whether and how they felt their own behaviour and their child's behaviour was different because of the study. They were asked to read and comment on a brief summary description of the library visit that I had prepared. The description focused on events rather than interpretations of events.

3.6.4.2 Specific questions arising from the visit

I asked mothers typicality questions about the activities I had observed and recorded during the library visits. I also asked each mother about general themes that had emerged from the data associated with her own and other subjects' visits. For example, if I had observed that a child played and talked with many other children while in the library, I would have said: "X played and talked with many other children during your library visit. Does she usually do this while at the library?" followed by "How important do you think opportunities for social interaction with others is for X while she is at the library?" I also included questions about activities which I had seen in other visits. For example, if I had observed that a mother and child did not read a story together during the library visit but that many other families had, I would have said: "You did not read a story together while in the library. Is this usual?" followed by "How important is the library as a place where you can read stories together?" A list of the specific questions asked in each interview was added to the ethnographic record of each case.

3.6.4.3 How the diary was kept questions

In order to get some sense of how thorough and accurate the mothers' diaries

were, I asked them to tell me how complete they thought they were, how they went about keeping them and to identify any problems they had encountered.

3.6.4.4 Diary incident questions

I then asked for the diaries and read, usually aloud to the mothers, the events they had recorded in the diary. As we went along I asked expansion questions about most events in order to allow the mothers to describe and explain them more fully. I also asked analytic questions to try to determine how typical specific activities were, how they connected to other events in the children's lives and if they were associated with particular contexts. Sometimes, especially after general themes had begun to emerge from the diary data, I asked specific questions that related to these themes. This was difficult because, unlike the specific questions that emerged from the library visit data, I had very little time to examine and think about the material.

3.6.4.5 Library materials borrowed questions

The mothers and I reviewed the lists of materials that had been borrowed during the library visits to determine whether or not all items had been used.

3.6.4.6 Socio-economic and demographic data questionnaire

A brief, basic socio-economic and demographic data questionnaire (see Appendix VI) was administered at the end of the interview.

3.6.4.7 General

The interviews, except for the final questionnaire, were tape-recorded. I prepared verbatim transcripts of the interviews. Portions of the recordings not relevant to the study such as general talk between the mothers and their children or

telephone calls, were summarized as observation notes rather than transcribed fully. I prepared field notes to describe and record pertinent background information, such as where the interview took place and how long it lasted as well as methodological and theory notes. I transcribed the diaries.

In addition to the diaries and the questionnaires, the data collected in the follow-up interviews included 477 pages (about sixteen per case) of interview transcripts, forty-one pages (about one per case) of interview field notes, and thirty audio-recordings archived on ninety minute cassettes (about one per case).

3.6.5 Other

Occasionally I had contact with study families outside of the formal data collection process. I encountered them in many places, including libraries, parks or at cultural events like concerts. Sometimes mothers would call me to tell me something they felt was pertinent. I prepared field notes to document these interactions. These are included in the ethnographic records and were used as data sources when relevant.

3.6.6 Ethnographic records

Ethnographic records for each case include the following elements:

- a. Initial contact summary form
- b. Informed consent form
- c. Informed consent meeting field notes
- d. Library visit draft field notes (with floorplan)
- e. Library visit field notes
- f. Library visit transcript

- g. Library materials borrowed list
- h. Library visit mother verification summary
- i. Interview draft field notes
- j. Interview field notes
- k. List of specific questions arising from the library visit
- l. Interview transcript
- m. Diary
- n. Diary transcript
- o. Basic socio-economic and demographic questionnaire
- p. Library visit audio-recording
- q. Interview audio-recording
- r. Miscellaneous (e.g. records related to other interactions with the family).

3.7 Observer effect

A reactive measurement effect is said to occur when a "respondent's sensitivity or responsiveness to a measure is affected by the process of observation or measurement" (Singleton et al., 1988, 112.). While the behaviour of the children, mothers and others in the study was altered somewhat by observer effect, good data collection strategies helped to lessen the impact. Analysis of the data for incidents of observer effect indicates that it was minimal. Mothers and library staff largely judged the library visits to be typical.

3.7.1 Data collection strategies

I used several strategies to try to reduce observer effect throughout the data collection, particularly during the library visit portion of the study.

During the informed consent interview I encouraged the children and also their mothers and siblings to handle, experiment with and ask questions about the recording equipment. Most of the children tried on the study shirts. I interacted with the children as much as possible. I hoped that familiarity with the recorder, the shirt and the researcher would increase the family's comfort with the research process. Generally children who had a lot of time to play with the equipment in the informed consent interview tended to pay less attention to it during the library visits than children (for example, those who went through a brief interview immediately prior to the visit) who had not had as much opportunity to handle it before.

In the informed consent interview and again just before the start of the library visit, I asked the families to do what they would normally do during their visit. I also asked that they try to ignore me as I would be busy doing my work making my observation notes. I hoped that clearly communicating expectations would make it easier for families to fulfil them. This seemed to be effective in at least some cases. Some of the children were able to do exactly as asked as can be seen in this excerpt from the field notes I prepared about Lesley's (J4) library visit:

Method Note: I was sitting at this table making field notes. Lesley sat down right beside me. However, she did not look at or talk to me. She really did seem to have understood that we would not talk until after the visit was over. Lesley was better at [avoiding] observer effect than M [mother]!

Some mothers repeated my instructions to their children to encourage appropriate behaviour. The following interaction between Ruthie (S6) and her mother during their library visit illustrates this well:

Ruthie: Mommy. Where's the..where's the lady that Kendra's [sibling] talking about?

Kendra: Lady.

Mother: The lady wanted us to come here and do our regular library visit. So that's what we're going to do, OK?

During the library visits I learned to observe from positions that were out of direct sight lines and sometimes even hidden and I avoided direct eye contact. I made a point of appearing to be very occupied, usually writing field notes or reading a library book. These behaviours, which were initially very effective, helped me to be less obtrusive and also less open to interaction with the families. They were usually very effective. My field notes include several notations like this one from Kaitlyn's (J6) ethnographic record:

Observation Note: Kaitlyn retrieved a couple of books, *Bugs*¹⁷ from the board book shelf and *The Wizard* from the new book shelf. She brought these over to M [mother] at the table. I was observing from behind the JP [juvenile picture book] shelf unit. Kaitlyn saw me and shouted out (paraphrase) "There she is!"

Method Note: Observer effect. I decided to move out of sight. I moved behind the JF/398 shelf unit and observed from behind the books. This seemed to work very well.

General works on observing children's behaviour such as Boehm and Weinberg (1987) and Touliatos and Compton (1983) indicate that observer effect may be reduced through habituation and suggest discarding the data from the first of

¹⁷ A list of all children's books, videos and other library material mentioned in the text of this report is included as Appendix XI.

multiple data collection sessions to combat this source of error. Tizard and Hughes (1984) used this strategy in their study. However Hall, Bartlett and Hughes (1988), in a study of patterns of information requests by children which used Tizard and Hughes' methodology, chose not to discard their first sets of recorded data. Rather, they carefully examined their first few transcripts, noted that there were few references to the equipment and concluded that observer effect was minimal. In the interests of shortening the data collection process for both the families and myself, I used a similar approach. Little observer effect was noted by myself, mothers or library staff in the first study visits. Two library visits, J1 and S3, had to be repeated because of equipment failure. In both cases second visits were very similar to the first ones. I encountered several of the subjects (C8, E2, E5, J1, J2) in the library while collecting data with other subjects. I informally observed them and prepared field notes about these encounters. The behaviour of these children and their families at these times was consistent with what I saw in their study visits.

I did discard one set of data because of observer effect. During this library visit it was clear to the mother, library staff and me that the child's behaviour was very unusual. Normally quite outgoing, she was quiet and shy and clung to her mother while in the library. She sat to one side in a chair, not playing with the toys or other children and not helping with selection of materials as her mother said she usually did. She ran off and hid and tried twice to remove the study equipment while she felt she was not being observed by anyone. At the end of the visit, she returned the shirt to me and immediately began to smile, laugh and talk. At home after the

visit she told her mother that she had not liked going to the library that day. This child declined to participate in a second visit. This case, not counted in the results of the study, was very useful in helping me to understand and recognize highly obtrusive observer effect.

3.7.2 Incidents of observer effect

Library visit transcripts, library visit field notes and follow-up interview transcripts were carefully analyzed and coded to identify incidents¹⁸ of observer effect.

The code manual is included in Appendix IX. A test of inter-coder reliability was conducted on a randomly chosen sample of four cases, one from each of the four sites.¹⁹ Comparison between a volunteer coder's analysis of the sample and my own resulted in an agreement rate of 99.2%, suggesting the coding scheme was valid as applied.

Table IV summarizes the results of the analysis of all thirty cases for incidents of observer effect during the library visit data collection sessions.

¹⁸ Incident is defined in the code manuals for each analysis, attached as Appendix IX.

¹⁹ For a full description of how rates of inter-coder reliability were derived see section 3.1.0.2.

TABLE IV
OBSERVER EFFECT - NUMBER OF INCIDENTS BY TYPE

Type of Observer Effect	Who is affected				
	Child	Mother	Sibling	Other	Total
Behaviour					
Persistent	1	1	0	0	2
Not Persistent	6	0	0	0	6
(Total)	(7)	(1)	(0)	(0)	(8)
Percentage ²⁰					8.1
Equipment					
Persistent	5	0	0	0	5
Not Persistent	37	1	1	3	42
(Total)	(42)	(1)	(1)	(3)	(47)
Percentage					47.5
Researcher					
Persistent	1	0	0	0	1
Not Persistent	30	2	2	0	34
(Total)	(31)	(2)	(2)	(0)	(35)
Percentage					35.3
Other					
Persistent	2	0	0	0	2
Not Persistent	5	2	0	0	7
(Total)	(7)	(2)	(0)	(0)	(9)
Percentage					9.1
Total					
Persistent	9	1	0	0	10
Not Persistent	78	5	3	3	89
(Total)	(87)	(6)	(3)	(3)	(99)
Percentage	87.9	6.1	3.0	3.0	100.0

²⁰ Percentage refers to the percentage of the total number of all incidents of observer effect across all types and all categories of people.

A total of ninety-nine incidents of observer effect was identified in the thirty library visits. The number of incidents ranged from a low of none (four cases) to a high of ten incidents (one case), with an average of 3.3 and a median of three incidents per visit. Incidents of observer effect were coded according to type, with most seeming to arise from intrusion of the equipment (forty-seven or 47.5%) or the researcher (thirty-five or 35.3%). Incidents were also analyzed to determine if they were persistent or not persistent with the majority (eighty-nine or 90.0%) being not persistent. Finally, incidents were examined to determine whose behaviour was affected with most (eighty-seven or 87.9%) involving the child.

3.7.2.1 Equipment

The observer effect incidents related to the equipment were usually very brief and seemed to arise from the children's natural curiosity. This excerpt from the transcript of Elissa's (C2) library visit is typical:

Observation Note: C [Elissa] and M [mother] sit down on bench to read *Funny Bones*. Elissa fumbles with the equipment in the shirt.
 Elissa: She got something in, something in right here.
 Observation Note: M distracts C by pulling her hand away and going on with the story.
 Mother: Oh, OK. Well don't sit on it then.
 Elissa: No.
 Mother: OK. Sit down. This is how the story begins.

Some of the children, like Lisa (C7) near the end of a one hour library visit, seemed to be completely unaware of the equipment.

Lisa: And, are we going to see the lady? We never did the tape talking.
 Even when I directly called attention to the equipment by approaching the children in the middle of their library visits if I needed to turn a tape over, they (and other

children around them who had no idea of what was happening) were not overly distracted by this and quickly returned to what they had been doing before. Emily (E7) was playing with some plastic toy animals with Clayton, another child who was in the library, when I turned the tape during her visit.

Researcher: Emily. I have to turn the tape over. OK?

Emily: OK.

Researcher: I'll show you how. And if you just stay still I'm really good at it. I'm good at fishing it out. Are you guys playing with the animals?

Emily: Yup.

Researcher: That looks like fun.

Clayton: We are playing with the animals.

Researcher: Ya. There, I can slide it out.

Observation Note: The tape turned off. The tape turned on.

Clayton: I know. This one is the meanest one. And this is stronger. And he whapped his tail at those polar bears.

Emily: (In a baby voice) I'm the baby. We're nice.

Antje (E3), Alexis (E5) and Marissa (S5) refused to wear the study shirt and equipment for more than the first few minutes of their visits. After negotiation, the shirt was removed and kept near the children for the remainder of the visits. Fatima (J5) took the shirt off a couple of minutes before her visit ended. Chloe (C6), Madeline (C8) and Danielle (E4) expressed discomfort with the equipment near the beginning of their visits. Their mothers successfully negotiated continuation with the children. Either immediately after the visit or in the follow-up interviews I asked the mothers if the problems with the equipment had a major impact on the visit. All indicated, like Chloe's (C6) mother, that after the problem was resolved, it did not.

Mother: I don't think it was except for initially trying to talk her into putting on the shirt.

Researcher: Ya. Ya.

Mother: After that it all went pretty well.

I also asked these mothers if they could explain why their children had problems with the shirt. Antje (E3) and her mother offered the following explanation:

Researcher: So part way through the visit Antje did not want to wear the shirt. Could you suggest why this happened?

Mother: Antje, do you know why you didn't want to wear the shirt?

Antje: Why?

Mother: You tell Mom.

Researcher: Do you remember?

Mother: Do you remember why?

Antje: Cause it's a boy's.

Mother: Because what? It was a boy's?

Antje: Ya.

Mother: The shirt?

Antje: Ya.

All of these mothers were able to explain their child's discomfort with the shirt in similar reasonable ways.

3.7.2.2 Researcher

Most of these incidents were very short. Many of them seemed to arise from the child's need to interact socially with the researcher. Usually the child was easily sent back to their library visit. This interaction with Fatima (J5) was typical:

Observation Note: C [child] approaches R [researcher] who is sitting at a table for older children fairly close to the picture book area.

David [younger sibling]: Hi.

Fatima: Hi Lynne.

Researcher: Hi Fatima. Hm..I need to make my notes now. So I have to work hard. Can you go back to your library stuff. And I promise we'll talk after.

Observation Note: C quickly returns to M [mother] and SIB [sibling] who are looking through the picture book shelves.

Several of the researcher-child interactions were quite functional in nature. So, for example, Elizabeth (E2) was sent by her mother to tell me the visit was almost over, Laura's (J1) mother asked her to take me the book they had just finished reading as

she had noticed that I tried to record the author and title of all materials used by the families while in the library, and Maggie (S1) remembering that I was a librarian asked me a reference question. Sometimes the children talked briefly about me with their mothers or siblings but all quickly turned to other activities.

3.7.2.3 Behaviour

Beyond reacting to the equipment and the researcher, the children's behaviour did not seem to be altered much by the study. A couple of children seemed to be initially a bit anxious like Chloe (C6):

Mother: OK. Wanna go see the bunny first? While I take the books back? OK, Chloe?

Chloe: (Clinging to M) I'm scared.

Mother: You're scared? (Whispering) You know what? They have some Christmas books.

While the children's age seemed to support natural, spontaneous behaviour, I was concerned that mothers and staff members might be much more prone to what I thought of as performance or unusually good behaviour in order to impress me. I carefully scrutinized data for incidents of this. When I found potential performance incidents, such as asking a child to recognize letters or numbers, I tried to determine if it was unusual. In the follow-up interviews mothers told me they usually did these sorts of things with their children and were able to provide another recent example of the same activity. If a child quickly and easily participated in the task initiated by the mother, I felt this indicated that they had some experience with it so that it was more likely to have been usual. Careful weighting of these diverse factors left me with only one clear incident of performance observer effect by Lesley's (J4) mother:

Mother: You going to tell me about this story in this book?

Lesley: Mommy. I want to play with my toys.

Mother: You can play with the toys after. After you tell me about the story in the book. You tell me about the story..you can have your choice. Come.

Lesley: Mommy no.

Mother: You promised to help Lynne. Look at here.

Counter examples provide further evidence that the children, mothers and staff acted relatively normally. I captured examples of behaviour that would be potentially embarrassing to the individual involved. Sacha's (J3) older brother might not have wanted either his mother or me to be aware of this:

Observation Note: Quiet for a while. Then you can hear sound of wooden blocks thumping on the ground as Stephen (sibling) throws blocks at Sacha. M [mother] can not see this as the children are crouched down.

Stephen: You are not cleaning up, so this is what will keep happening. You better help clean up Sacha.

Discipline scenes were quite common like this one between a library staff member and Ruthie (S6):

Staff3: (Sternly to S6) You can not run in here. You can not run in here. OK?

Ruthie: OK.

Staff3: Thank you.

In all I captured ten examples of mothers and three of staff members disciplining children during the library visits.

Sometimes the mothers, like Whitney's (E1), ignored or did not give in to their children's requests.

Mother: You're not taking any more home.

Whitney: See this.

Mother: You can look at it here.

3.7.2.4 Other incidents of observer effect

Other types of unusual behaviour mostly included incidents that were more generally related to the study than the specific allusions to the equipment or the researcher. The two persistent examples involved Danielle (E4) who seemed to have difficulty understanding how she was helping with the research.

Danielle: (To Staff2) I'm just helping that lady.

Staff2: Oh, OK. Where's your Mom and sister?

Mother: Come on honey. Come and play back here.

Danielle: Oh Mommy, I'm helping.

Staff2: Yes.

Mother: Ya. But you help back here. You just play.

Staff2: I think she's finished over there. Ya. You can just go play in the library.

Mother: (M [mother] and E4 walk towards the children's area). You just have to come here and do what you usually do. Just play with toys and stuff. I'll read you a book. Whatever you want.

Danielle: But then I can't help.

Mother: She's not gonna..No, she's..she's listening. She doesn't need you to talk right to her. Just play..Look they have the house down there. Look at that.

Danielle's mother noted that although this incident did occur during the visit it happened in addition to other usual things they did while at the library.

3.7.3 Typicality verification

Immediately after the library visit had ended, I tried to ask both mothers and library staff if that particular library visit had been typical. Sometimes, for example when a family left immediately, I was unable to do this. Sometimes I forgot to do it. In the follow-up interviews I asked all the mothers this question again. The results are presented in Table V.

TABLE V
TYPICAL VISIT ANALYSIS

Source of Information	After the Visit		Follow-up Interview	
	No.	%	No.	%
Mother				
Yes	14	46.7	11	36.7
Yes qualified	5	16.7	19	63.3
Don't know	0	0.0	0	0.0
No	0	0.0	0	0.0
Missing value	11	36.6	0	0.0
Total	30	100.0	30	100.0
Library Staff				
Yes	7	23.3		
Yes qualified	2	6.7		
Don't know	4	13.3		
No	0	0.0		
Missing value	17	56.7		
Total	30	100.0		

None of the mothers or staff indicated that any study library visit was completely unusual. They considered this thoughtfully as can be seen in the following entry I made in my field notes after Rebecca's (S4) visit:

Observation Note: When asked if the visit was an ordinary one for then, M [mother] said yes. They usually play with the toys, share a story during each visit. M said she has also been making a point of trying to use the catalogue to look up something of interest to C [child] each time they go to the library. M also noted that even the problems they had are usual at the library.

Both mothers and library staff were able to explain how a visit was different as can be seen from this entry in my field notes about Hannah's (S7) library visit:

Observation Note: Staff told me this had been a fairly typical visit.

They felt that the children had probably been a bit quieter than usual. When the family comes for story time, they are there much longer which may explain why there seemed to be better control on this visit.

During the follow-up interviews, more of the mothers qualified their "Yes" response to this question. I suspect that after having had more time to think about the study visit, they were better able to identify small variances. As can be seen in this excerpt from the interview with Maggie's (S1) mother, mothers were usually able to explain differences.

Mother: The only thing I would have said it was different because it was really busy at the library there that day, it probably would have been a little shorter. Normally..she's there for half an hour, forty-five minutes. And I just leave her on her own. And when we go to the other library where there's more toys..the downtown library..she'll spend a lot more time interacting with other kids rather than with me. But lots of times we've sat down and read like we did today..or that day. And she likes to pick out her own movies and pick out her own books. So, pretty much. If anything because of the business of other kids and that sort of thing she didn't have as much interaction with other kids.

As in Maggie's visit, most of the variants identified by mothers involved differences in emphasis or context rather than complete divergence from a usual roster of activities.

3.7.4 Summary and conclusion

While observer effect was clearly present during the study library visits, it did not appear to have a major impact on the children's activities and therefore on the study results. The number of incidents per visit was low. Mothers, and in some cases staff, verified that the visits were largely typical. I have concluded that behaviour associated with observer effect occurred largely in addition to rather than in place of all the things that the children usually did while in the library.

3.8 Trustworthiness

3.8.1 General

Trustworthiness is a term used by Lincoln and Guba (1985) to encompass the concepts of credibility, transferability, dependability and confirmability which loosely correspond to internal validity, external validity, reliability and objectivity.

The following measures were used to increase trustworthiness in this study:

- a. prolonged engagement (thirty cases collected over a one year period) and focused observation to ensure that as much as possible is learned about the research questions and to reduce the likelihood of observer effect (Erlandson et al. 1993; Lincoln and Guba 1985; Miles and Huberman 1994);
- b. the use of less obtrusive measures (Goodwin and Goodwin, 1989; Miles and Huberman 1994; Zimmerman and Wieder 1977) such as simple observation and observation by informants (the mothers) to lessen observer effects;
- c. triangulation (Ball 1988; Denzin 1988a, 1988b; Erlandson et al. 1993; Miles and Huberman 1994; Taylor and Bogdan 1984) of data collection sources by purposeful sampling of sites and subjects, of methodologies by using audio-recordings, observations and diaries: diary-interviews to seek credibility through convergence of evidence coming from varied approaches;
- d. carefully weighting the evidence (Lofland and Lofland 1995; Miles and Huberman 1994; Taylor and Bogdan 1984) to determine which data are more trustworthy by considering such things as whether it is first or second hand, from a better or poorer subject/informant or collected in an unusual

- circumstance;
- e. keeping track of the observer's feelings, responses and decisions during data collection to account for this sort of researcher effect on data collection and analysis (Erlandson et al. 1993; Lincoln and Guba 1985; Lofland and Lofland 1995);
 - f. systematically looking for extreme cases, negative evidence and rival explanations (Miles and Huberman 1994; Patton 1990) and explaining or altering the analysis in accordance with the evidence;
 - g. participant verification (Erlandson et al. 1993; Lincoln and Guba 1985; Miles and Huberman 1994; Sharpe 1988) by presenting library visit summaries to the mothers for verification and asking typicality questions during follow-up interviews;
 - h. peer debriefing (Erlandson et al. 1993) by sharing emerging results with both professional and research colleagues to seek critical feedback;
 - i. providing a complete description of both the methodology (sources, procedures, contexts, and theories) and findings with full documentation so that others may determine how transferable the results are to their own situations (Erlandson et al. 1993; Kirk and Miller 1986; Lincoln and Guba 1985); and
 - j. inter-coder reliability checks (Miles and Huberman 1994; Sowden and Keeves 1988) completed after the final coding schemes emerge to assure dependability.

3.8.2 Researcher as instrument

My background increased the trustworthiness of the data collected. My undergraduate education included courses in child development. I am a professional librarian with seventeen years of experience working with children in public libraries. My knowledge of children, public libraries and library materials for children brought expertise and understanding to the observation process, helped me to gain access to the data collection sites and increased my credibility with the families who participated in the study.

3.9 Ethical considerations

3.9.1 Informed consent

Informed consent was sought from all participants.

3.9.1.1 Mothers

A letter of information and a consent form for mothers was developed to comply with the guidelines established by The University of Western Ontario and the Social Sciences and Humanities Research Council (SSHRC) of Canada. These are attached in Appendix VII.

3.9.1.2 Other library users and staff

As data collection was likely to and did involve recording conversations of the children with other library users and staff, alerting signs were posted prominently during data collection. A sample sign is included in Appendix VII. Although I thought the signs might draw attention to the study and therefore possibly cause users to

behave abnormally, their right to know takes precedence (Dewdney 1992). I did notice a few people reading the signs. At least three seemed to identify both myself and the child subject. However, this did not appear to affect their behaviour. For example, they did not leave the library, move away from either myself or the child or increase their interaction with the child after reading the sign. Copies of the letter of information for participants were available at the circulation desks for general library users who wanted more information. No one requested a copy as a result of reading an alerting sign. Although it was not necessary, I was prepared to cease observation and audio-recording if asked to do so by a user or staff member.

3.9.1.3 Children

Special procedures are required to obtain the informed consent of minors. SSHRC (1992), the American Psychological Association (1968) and general works on doing research with minors such as Tymchuk (1992) require that written informed consent of a parent be obtained first, followed by consent from the minor in a form suited to their ability. Therefore, mothers were first asked for permission for their children to participate. Then I explained the study to the children. Ferguson (1978) suggests that preschool children can understand explanations of the purpose of research if they are given in concrete terms and relate to an immediate and familiar situation. Assuming that the children would be familiar with the concepts of both libraries and students through their everyday life experiences, I told them that I was a student who wanted to learn how small children used libraries. Then I told them I would like to watch and tape record them to see what they did while they were at the

library. I showed them the special shirt and the recorder. I told them the study would not hurt. I explained that they did not have to do it unless they wanted to and told them they could stop taking part any time. Finally I asked if they wanted to be in the study. While the children were too young to provide written consent, all of them actually signed the form in one way or another. A notation of their verbal consent was also made and witnessed through signatures from both the mothers and myself at the end of the Informed Consent forms.

Two children declined to participate during the informed consent interviews. Another declined a second data collection session after excessive observer effect invalidated the first library visit. The children's wishes were respected.

I was careful to observe and listen for signs that a child wished to stop participating part way through a visit. While it was not actually necessary to halt data collection during any of the library visits, I did interrupt three sessions to discuss this option with mothers after sensing some discomfort in the child. The mothers reassured me that all was or would quickly be well. This turned out to be accurate as all signs of anxiety disappeared within a few moments. If they had not, I would have intervened to end the data collection. Similarly, although it was not necessary to do so, if I had noticed that a child was engaged in any activity which I felt was dangerous for her (such as climbing up a book shelf or talking to a stranger without the mother's knowledge), I would have interrupted the library visit to ensure the child's safety.

3.9.2 Confidentiality

To maintain strict confidentiality codes were assigned to each subject and data collection site. Personal and site identifiers were omitted or replaced by codes or pseudonyms in all parts of the ethnographic record. Pseudonyms will be used in all reports, including this one, arising from the research. Names, addresses and phone numbers of families are noted on the Initial Contact Summary forms (see Appendix III) along with their codes and pseudonyms. These are stored in a separate, locked file to which only I have access. To support the anticipated longitudinal study arising from this research, these records will be maintained in a secure location for as long as contact is needed. After this, any identifying information such as name and address will be purged from these records using indelible black markers.

Many of the mothers encouraged me to use their children's real first names when presenting the results of the study. I declined, explaining that I was obliged to protect the privacy of the children.

3.9.3 Reciprocity

Chatman (1984, 432) defines reciprocity as "the process by which researchers offer something to the respondents in exchange for gaining entry, and obtaining interviews." In this case, reciprocity consisted of the following. First, many of the mothers told me that they had enjoyed participating in the study. It gave them an opportunity to discuss their daughters with another adult who showed keen interest in the children and was an attentive listener as they shared triumphs and concerns around parenting issues in the follow-up interviews. Some of the mothers said they felt that

being in the study allowed them to reciprocate for life-long use and appreciation of public libraries. Second, I have shared the results of the study with the families through distribution of a brief report and a seminar presentation. Finally, to thank the children, I have invited them all to a special, library theme story time program.

3.9.4 Ethical review process

The Research Committee of The Graduate School of Library and Information Science at The University of Western Ontario formally reviewed an application for permission to use human subjects in this research project. Approval was granted in January 1994 (see Appendix VIII).

3.10 Data analysis

3.10.1 General process

Data collected were carefully perused for categories, themes and patterns which related to the research questions. This involved:

- a. coding: assigning a name or symbol to parts of the ethnographic record in order to identify and cluster segments related to a particular concept (Mellon 1990; Miles and Huberman 1994; Strauss and Corbin 1990);
- b. memoing: preparing written theory notes which described emerging coding schemes, analytical insights and questions, and operational notes or reminders (ibid.); and,
- c. diagramming: preparing "visual representations of relationships between concepts" (Strauss and Corbin 1990, 197).

Analysis was an ongoing process and began immediately after data collection started (Strauss and Corbin 1990; Taylor and Bogdan 1984). This allowed the data collection process to be refined so as to focus more clearly on important themes as they emerged. To facilitate coding, records were entered into "The Ethnograph, Version 4.0," a qualitative data analysis computer software package. The following general themes, which arose from the conceptual framework and literature search, served to focus early observation and provided an initial broad framework for data analysis:

- a. child uses of the library (including traditional services such as readers' advisory, reference and programs, and other uses which emerged from the observations);
- b. the use of books and other library resources by the child at home and in other places outside the library;
- c. learning opportunities presented by the library through its materials and other services and learning behaviour by the child, especially questioning and information sharing conversations.

In keeping with naturalistic inquiry actual themes and codes emerged from the data as they were collected. These are discussed in the results chapters.

3.10.2 Inter-coder reliability checks

Tests of inter-coder reliability were conducted after the final coding schemes were developed. Three different individuals assisted with this process. A PhD student with formal training in research methods and some experience in qualitative data

collection and analysis was the volunteer coder for the analysis of incidents of observer effect. A professional librarian with five years of experience in public library work with children coded sample ethnographic records for the library visit and at home use analyses (see Chapters Four and Five). An individual who is both a professional children's librarian and a trained elementary school teacher with a total of fifteen years' experience in both fields did the inter-coder coding for the learning opportunities analysis (see Chapters Six through Eight). The volunteer coders' substantive knowledge of the areas contributes to the trustworthiness of the results of these tests.

For each analysis the volunteer coder was given four randomly chosen cases (one from each site) and the appropriate code manual and asked to code the raw data for incidents of the specific themes included in the coding scheme. One or more coding decisions was made for each incident. For example, in coding incidents of observer effect, the first task was to decide if observer effect had occurred. Then a second decision was made about whether or not the incident was persistent. Thus each incident of observer effect involved two coding decisions and was assigned two codes. The volunteer's coding was then compared to my coding of the same data. A rate of agreement, defined as the percentage of coding decisions which were the same, was calculated. Segments of the raw data that were coded differently by myself and the volunteer were identified and discussed. Sometimes the coding scheme was modified slightly to account better for a difference. For example, more specific examples of a code type might be added or a code definition made more specific to reduce

ambiguity. The volunteer and I then, based on our discussion, independently recoded the data. If a modification was more substantial, for example adding a completely new code type to the scheme, two more randomly chosen cases were coded in addition to reviewing the coding of the first four. A final rate of agreement was calculated.

Agreement rates are reported in Table VI.

TABLE VI
INTER-CODER RELIABILITY RATES

Analysis	Coding Decisions No.	Rate of Agreement	
		No.	%
Observer Effect (4 cases)	131	130	99.2
Library Visit (6 cases)	74	71	95.9
Home Use (4 cases)	243	229	94.2
Learning Opportunities (4 cases)	307	293	95.4
Total	755	723	95.8

All rates of agreement surpass the recommended level of 70% (Krippendorff 1980, 147) and therefore suggest that the coding schemes were valid as applied.

Coding manuals are attached as Appendix IX. More detailed information about

each of the tests of inter-coder reliability and the results of the coding analyses are reported in the appropriate sections of the results chapters.

CHAPTER FOUR - GOING TO THE LIBRARY

4.1 Introduction

Genevieve's (E8) mother had left her in the children's area while she went to look for a book for herself in the adult stacks. She had asked Genevieve to select five books for borrowing. When mother returned Genevieve was sitting cross-legged on the floor, looking through one book from a large pile of picture books that she had collected in front of her.

Mother: Genevieve! How many books do you have?

Genevieve: One more.

Mother: Just one more! Remember how many books I said?

Genevieve: Yup.

Mother: How many?

Genevieve: Four.

Mother: I said five. And I think you've got more than five.

Genevieve: I do..I do have more.

Mother: Ya. We're going to have to put some back.

Genevieve: [Picking up and looking at the books one at a time] I want this one. Where's that one? That one. That one.

...

Mother: OK. I leave you for three minutes and look, you've cleaned out the library.

Genevieve: That one. I need a book like that one and that one.

Genevieve eventually talked her mother into six books. The two of them examined the pile together to figure out which six would be the best to take home. This episode from a library visit transcript is interesting because it shows how important the library's collections, particularly picture books, were to the children who participated in this study ("I need a book"). Also note that the mother played a mediating role between Genevieve and the library, helping her to use it in an effective way. These

themes were continually reflected in my observation of the children's behaviour while they were in the library.

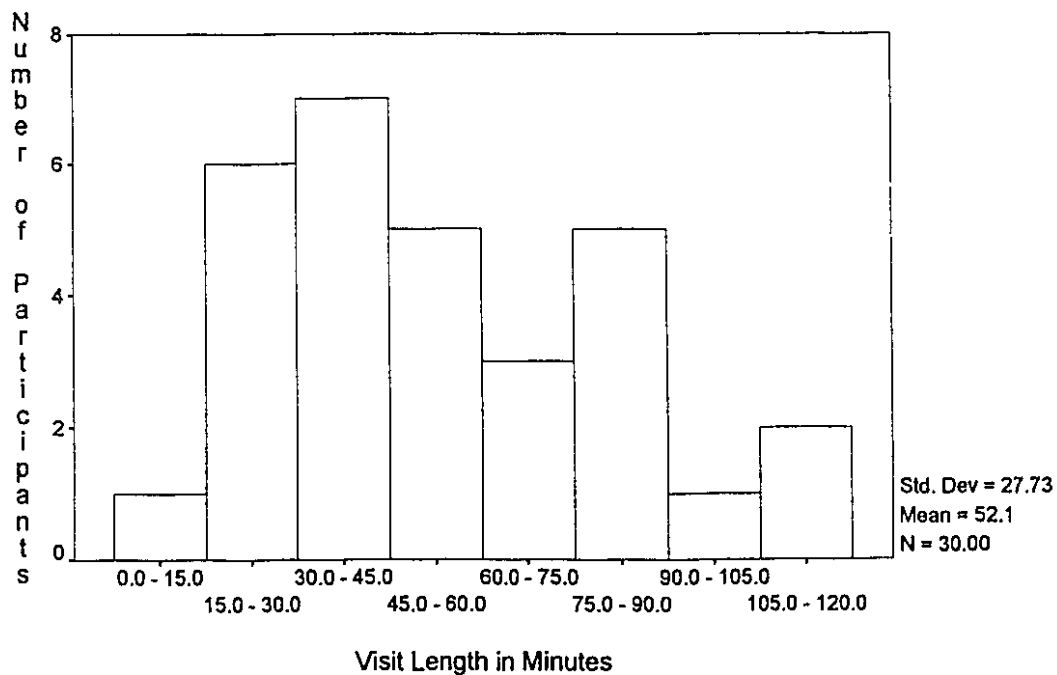
4.2 General characteristics of library visits

For each of the visits I noted the following general information: start time, end time, date, who participated, what was borrowed. A detailed summary of this data by case and site is included in Appendix X.

4.2.1 Length of visits

The length of the library visits is summarized in Figure 1.

**FIGURE 1
LIBRARY VISIT LENGTH**



Visit length ranged from twelve to 118 minutes, with a mean of 52.13, ($\sigma=27.73$) and a median of forty-five minutes. The distribution of values is quite skewed, although a cluster occurs in the fifteen to forty-five minute range. Some of this variation can be explained by looking at what the children did during library visits. Attendance at story time lengthened visits. Several children engaged in long periods of play. The two shortest visits were almost completely restricted to selecting and checking out materials. Visits falling within the cluster usually involved a mix of book selection, sharing stories and play.

4.2.2 Timing of visits

Most of the visits occurred on a weekday (twenty-seven or 90%) with many in the mornings (eighteen or 60%). Children who did not visit on a weekday morning often had a constraint in their family life that prevented morning visits. Three of the five Saturday and weekday evening visits involved mothers who worked full time. Mothers of the other two children indicated that they chose an evening or Saturday because this was a time when their husbands were able to care for younger siblings at home. At least five of the ten children who made afternoon visits attended junior kindergarten or another nursery school program in the morning.

4.2.3 Who comes on visits

As a condition of the study the children went to the library with their mothers. Although fathers were not specifically excluded, none came. In the follow-up interviews many of the mothers told me that this was not unusual although their husbands sometimes came along too or took their daughter to the library on their

own. A couple of the mothers noted that occasionally their children went to the library with another adult such as a child care worker, a relative or a neighbour.

Siblings took part in eighteen (60.0%) of the visits. This represents 75.0% of visits by children who had at least one brother or sister. Younger siblings (82.4% of all) came along more frequently than older siblings (33.3%) who often were in school. Two families were accompanied by a child who was being cared for by the mother. No one brought a friend. Overall I noted that the children in my sample tended to visit the library with other members of their family in addition to their mothers.

4.2.4 Materials borrowed

Table VII summarizes types of materials borrowed by broad category and format for all thirty subjects.

TABLE VII
LIBRARY MATERIALS BORROWED

Material	Total Items Borrowed		Items Borrowed Per Visit		
	No.	%	Mean	Median	Range
Print ²¹					
Fiction	209	73.3	7.0	5	1-34
Nonfiction	24	8.4	.8	0	0-5
Total	233	81.8	7.8	6	2-39
Nonprint					
Video	34	11.9	1.1	0/1	0-4
Audio	6	2.1	.2	0	0-4
Other ²²	12	4.2	.4	0	0-3
Total	52	18.2	1.7	2	0-6
Total	285	100.0	9.5	7	2-40

Families borrowed an average of 9.5 children's items per visit. Typically they chose picture books, one or two videos and sometimes a folk tale. Although magazines were available, no one borrowed a magazine. Factual nonfiction, such as books with information about whales or insects, was borrowed only by a few children who had a specific request or interest in a topic.

²¹ The library system where the study was conducted uses the Dewey Decimal system to classify its collections. I counted picture books (JP), easy readers (JE), novels (JF) and folk and fairy tales (J398) as fiction. Books receiving a numerical call number, other than folk and fairy tales, were counted as nonfiction.

²² This category includes items like multimedia kits and pictures.

4.3 Sources and credibility of data

Library visit field notes and transcripts were analyzed and coded to determine what the children did while they were at the library. The code book for this analysis is included as Appendix IX.2. An initial test of inter-coder reliability based on four cases resulted in an agreement rate of 92%. The volunteer coder identified ambiguity in the code definitions for "Ask a reference question" and "Ask a reader's advisory question." After discussion, the definitions were revised. We each reviewed the initial cases and coded two additional ones. The final agreement rate for all six cases was 95.9%.

I prepared a brief (one to two page) descriptive summary of each visit. In the follow-up interviews I asked the mothers to read these and tell me if they felt the summary accurately described the visit. Twenty-nine (96.7%) indicated the summaries were correct. One mother did not recall one small incident that I included in the summary although she indicated that the rest was fine. The results of the summary analysis complement the mothers' responses to the typical visit question I asked in the follow-up interviews (see section 3.7.3).

I also asked the mothers typicality questions about specific activities that I had observed (such as playing or sharing a story). Their responses and explanations helped me to understand what I had seen and how much weight to give to particular incidents (or lack of incidents) in each case. Most of the activities I saw (or did not see) were confirmed by the mothers as usual or fairly usual.

4.4 Library visit activities

4.4.1 General

My observations indicate that preschool girls engage in some or all of the following activities during visits to the public library:

- Return library materials
- Choose library materials
 - Select materials
 - Search the catalogue
 - Ask a reader's advisory question
 - Ask a reference question
- Use library materials
 - Peruse a story or book
 - Read or listen to a story or book being read by another
 - Listen to an audio-recording or view a video-recording
- Play with a toy, game or puzzle
- Interact with others
 - Interact socially with another
 - Observe or watch someone
 - Interact with library staff
- Take part in an activity
 - View an exhibit
 - Attend a formal library program
 - Participate in an informal library program
- Use support facilities like public washrooms, water fountains or photocopiers
- Check out library materials.

Definitions of each activity are included in the Library Visit Code Manual (Appendix IX.2).

Data are summarized for all thirty library visits in Table VIII. The first column identifies the type of activity. The second column reports the total number of coded incidents for each type of activity. The third column expresses the number of incidents as a percentage of all activities of all types. The fourth column lists the

mean number of incidents of each activity per library visit or case. Columns five and six indicate the number and percentage of visits or cases that had at least one incident of an activity type. For example, I observed and coded eighty-three incidents of selecting library materials, which represented 16.1% of all incidents of all types of activities and an average of 2.8 incidents of selection per library visit. Selection occurred in all thirty (one hundred percent) of library visits.

TABLE VIII
ACTIVITIES OCCURRING DURING LIBRARY VISITS

Activities	Incidents			Cases	
	No.	%	Mean	No.	%
Return materials	12	2.3	.4	12	40.0
Choose materials:					
Select	83	16.1	2.8	30	100.0
Catalogue search	7	1.3	.2	7	23.3
Reader's advisory	30	5.8	1.0	17	56.7
Reference	21	4.1	.7	14	46.7
Use materials:					
Peruse	34	6.6	1.1	10	33.3
Read	50	9.7	1.7	21	70.0
Listen/view	1	.2	.0	1	3.3
Play	56	10.9	1.9	26	86.7
Interact:					
Social interaction	50	9.7	1.7	19	63.3
Observation	32	6.2	1.1	11	36.7
Staff interaction	66	12.8	2.2	25	83.3
Do an activity:					
Exhibit	17	3.3	56.7	9	30.0
Formal program	7	1.3	2.3	6	20.0
Informal program	14	2.7	4.7	13	43.3
Facility use	5	1.0	.2	5	16.7
Check out	31	6.0	1.0	26	86.7
Total	516	100.0	17.2	213	50.7

Table IX - A describes library visit activities for each site in terms of the number of incidents of the activity per site (first column under each site) and the percentage of the total number of incidents of the activity type across all four sites (second column under each site). Table IX - B lists the number of cases for each site in which at least one incident of an activity occurred, also expressing this as a percentage of the number of cases for the site. For example, at Site C there were twenty-eight incidents of selection of library materials, representing 33.7% of all incidents of selection at all four sites. These twenty-eight incidents involved eight girls or one hundred percent of cases at Site C.

TABLE IX - A
LIBRARY VISIT ACTIVITIES - NUMBER OF INCIDENTS BY SITE

Activity	Site C		Site E		Site J		Site S		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Return materials	0	0.0	3	25.0	4	33.3	5	41.7	12	2.3
Choose materials:	28	33.7	22	26.5	18	21.7	15	18.1	83	16.1
Select	0	0.0	3	42.8	2	28.6	2	28.6	7	1.3
Catalogue search	9	30.0	12	40.0	5	16.7	4	13.3	30	5.8
Reader's advisory	3	14.3	11	52.4	3	14.3	4	10.0	21	4.1
Reference										
Use materials: Peruse	3	8.8	14	41.2	5	14.7	12	35.3	34	6.6
Read	13	26.0	7	14.0	20	40.0	10	20.0	50	9.7
Listen/view	1	100.0	0	0.0	0	0.0	0	0.0	1	.2
Play	19	33.9	13	23.2	13	23.2	11	19.7	56	10.8
Interaction:										
Social interaction	15	30.0	19	38.0	10	20.0	6	12.0	50	9.7
Observation	22	68.7	6	18.8	0	0.0	4	12.5	32	6.2
Staff interaction	14	21.2	12	18.2	32	48.5	8	12.1	66	12.8
Do an activity: Exhibit	13	76.5	1	5.9	3	17.6	0	0.0	17	3.3
Formal program	3	42.9	0	0.0	4	57.1	0	0.0	7	1.3
Informal program	4	28.6	9	64.3	0	0.0	1	7.1	14	2.7
Facility use	3	60.0	1	20.0	1	20.0	0	0.0	5	1.0
Check out	8	25.8	10	32.3	7	22.6	6	19.3	31	6.0

TABLE IX - B
LIBRARY VISIT ACTIVITIES - NUMBER OF CASES PER SITE

Activity	Site C (n=8)		Site E (n=8)		Site J (n=7)		Site S (n=7)		Total (n=30)	
	No.	%	No.	%	No.	%	No.	%	No.	%
Return materials	0	0.0	3	37.5	4	57.1	5	71.4	12	40.0
Choose materials: Select	8	100.0	8	100.0	7	100.0	7	100.0	30	100.0
Catalogue search	0	0.0	3	37.5	2	28.6	2	28.6	7	23.3
Reader's advisory	5	62.5	7	87.5	2	28.6	3	42.9	17	56.7
Reference	3	37.5	5	62.5	3	42.9	3	42.9	14	46.7
Use materials: Peruse	2	25.0	4	50.0	2	28.6	2	28.6	10	33.3
Read	7	87.5	4	50.0	5	71.4	5	71.4	21	70.0
Listen/view	1	12.5	0	0.0	0	0.0	0	0.0	1	3.3
Play	8	100.0	7	87.5	4	57.1	7	100.0	26	86.7
Interaction:										
Social interaction	8	100.0	4	50.0	4	57.1	3	42.9	19	63.3
Observation	5	62.5	4	50.0	0	0.0	2	28.6	11	36.7
Staff interaction	5	62.5	7	87.5	6	85.7	7	100.0	25	83.3
Do an activity: Exhibit	6	75.0	1	12.5	2	28.6	0	0.0	9	30.0
Formal program	3	37.5	0	0.0	3	42.9	0	0.0	6	20.0
Informal program	4	50.0	8	100.0	0	0.0	1	14.3	13	43.3
Facility use	3	37.5	1	12.5	1	14.3	0	0.0	5	16.7
Check out	6	75.0	8	100.0	6	85.7	6	85.7	26	86.7

Except for returning and checking out library materials, which tended to happen at the beginning and end of library visits, I did not observe any patterns in the order that activities took place.

No single child did all of the types of activities. Information supplied by the mothers in the follow-up interviews indicates that many of the children vary what they do on visits according to factors such as how long they can stay, what opportunities are available, how the child is feeling and whether or not a sibling is present. Some activities, such as play and socially interacting with another child, sometimes happened simultaneously. The only thing that all thirty girls did was to select materials to borrow.

4.4.2 Returning and checking out library materials

Fewer than half of the children participated in the return of library materials. As can be seen in the following interaction between Catherine (C4) and her mother, they seemed eager to get immediately into the children's area.

Mother: OK..Shall we go inside? I've got some books here. Come on. And I'm gonna give these back to the librarian because they are due today. [Stopping at the rabbit cage] Oh look at. There's the bunny. Want to come over here? Shall I give the books back to the librarian?

Catherine: Ya.

Observation Note: Mother goes over to the circulation desk. Catherine goes into the picture book area and sits down to play with the BRIO train set.

Almost all the children were involved in checking out library materials. This was usually done on the way out of the library when the mothers had gathered up everything they needed to take with them, including their children. Check out also seemed to be more interesting. It gave the children an opportunity to interact with

library staff (see 4.4.6), to make a rubber stamp bookmark (see 4.4.7) and to observe the checking out procedure. Emily's (E7) experience is typical. She and her mother had gone to the circulation desk, opened their books up to the back and piled them on the counter. Staff1, barcode reader in hand, began to check out the books. Every time the barcode reader read a barcode it made a fairly loud beep. The beeps could be heard in the background during this checkout transaction.

Mother: [Handing her library card to Staff1] Here's the card.

Observation Note: Can hear the books being "beeped" out. Staff1 [professional librarian, children's services] answers the phone and begins to talk to the person on the other end while continuing to mark out the materials.

Mother: [Whispering] Thanks.

Emily: [Whispering] Look at these.

Observation Note: Staff1 continues phone conversation, then puts the person on hold and returns to the check out transaction with my family.

Mother: How long for the audio-cassette?

Staff1: Audio-cassettes are three weeks like the books.

Mother: OK. The videos are there.

Staff1: It's the videos that are two days.

Mother: Should get a tape player and headphones for the kids to listen to the tapes here too.

Staff1: That's a good idea. That's a good idea. Because some music stores, they have places you can test them.

Mother: Ya.

Staff1: So they have...

Emily: [Mimicking the barcode reader] Beep beep.

Staff1: [Reading from screen] This is not a valid patron code.

Mother: Oh.

Staff1: No. I just..I pushed the wrong button.

Emily: [Mimicking the barcode reader] Beep beep.

Staff1: Thank you.

Emily: [Mimicking the barcode reader] Beep.

Staff1: It was me, not your card.

Emily: [Mimicking the barcode reader] Beep beep. Beep beep. Beep.

Observation Note: Background noise - circulation desk noises.

Emily: [Mimicking the barcode reader] Beep beep.

Staff1: [To Emily] Beep beep.

Emily: [To Staff1] Beep beep.

Staff1: That makes a funny noise, doesn't it? [Commenting on the book she is checking out] You must like *Curious George*.

Emily: Ya.

Staff1: Do you like *Curious George*?

Emily: Uhm hmm.

Staff1: And *Babar* too I bet. Huh?

Emily: Hmm.

Staff1: There we go. And one more. We have to do this one. There we go. Now..

Emily: And this is ours?

Staff1: Yup.

Staff1 used the checkout transaction to interact with Emily. She connected by echoing the beeping imitation initiated by Emily, a strategy which recognized and welcomed Emily as a conversational partner. The interaction then moved on to focus on the stories that Emily was borrowing and positively reinforced her choices. For most children in the study the only interaction with staff occurred at the circulation desk (see section 4.4.6.3). Only rarely were these opportunities used to talk about books. One implication of this finding is that library staff, like Staff1 with Emily, could better use interactions at the circulation desk to support and promote children's use of library materials.

4.4.3 Choosing library materials

Selecting materials to use in the library or at home was the only one of the fourteen distinct activities that I observed all the children doing at some time during their visit. Most of the catalogue searches (57.1%), reader's advisory questions (96.7%) and reference queries (95.2%) occurred at the same time and were part of the choosing process.

Some children like Laura (J1) selected independently.

Laura: Got a book that we can borrow.

Mother: OK. How about you just put that in the back pack? Can you pick out a few more?

Laura: Uh huh.

Mother: OK.

More commonly selection was a joint, negotiated activity between the mother and the child.

Elissa (C2): Now I got to pick some books that I want. Like that I like...These two book...books I want to pick out for myself.

Mother: Are you sure?

Elissa: And umm. Have..

Mother: Hmm:m?

Elissa: Have that one?

Mother: Why?

Elissa: Cause, cause I like it with that pig.

Mother: Oh, it's a pig. I didn't even notice that. We've got a pig here too. You can get two more.

Elissa: Two more.

Mother: You don't have to get two more.

Elissa: Let's say two more for me.

Mother: [Elissa chooses a book, mother looks at it and then returns it to the shelf saying] I looked at this one and I don't think it would be right.

Elissa: OK.

Mother: *Haircuts for the Woolsies*. Do you know that sheep get haircuts?

Elissa: [Laughing] Yaaa.

Mother: What do we get from sheep?

Elissa: Ya.

Mother: Wool for knitting. All right. Put that one back.

Elissa: I like this one best.

Mother: ... We need to check them out, don't we? I've found some here too.

Observation Note: Mother shows Elissa the books she has picked out for her while she was playing.

Elissa: For me. That..that you got?

Mother: Ya. This one. Remember this one, *The Little House*?

Elissa: Ya.

Mother: And since we're going to do some gardening..this..What's that?

Elissa: A rose.

Mother: A rose. It's all about growing a garden.
 Elissa: OK. All of those are for me?
 Mother: Well. This one on top, I'm getting for Mark [older sibling].
 Elissa: Oh, just one you getting for Mark?
 Mother: Yes.
 Elissa: Oh. So I get a lot.
 Mother: [Laughing] Ya.

Elissa's mother used most of the strategies I saw others use to help their children with selection: reading out titles, setting limits (number, reading level, format and content), indicating how to assess an item, suggesting titles and consulting with their children about items they had chosen for them.

Elissa's mother simply stated an item was inappropriate ("I don't think it would be right"). Others like Danielle's (E4) explained, distracted and/or offered alternatives.

Danielle: [Browsing through the video racks] What is this one?
 Mother: Oh, that's a *Ghostwriter*. That's not a nice one.
 Danielle: *Ghostwriter*?
 Mother: Ya. It's on TV. Remember? Mommy said "I don't like it very much." You gonna put it back in? There's *Homeward Bound* even, look. They have *Homeward Bound* here. We have that one at home, don't we? *The Snowman*. We have that one at home. OK. We got three. That's enough.

Incidents of reader's advisory took place in seventeen or 56.7% of the library visits, with all but three of the episodes involving mothers. Many of the mothers were excellent reader's advisors. Like Elissa's mother they knew what their children might be interested in because of things that were happening in their lives. Like Fatima's (J5) mother, they also knew from previous experience with the books, what their children liked and might like.

Mother: [Retrieving a book that was displayed on top of the picture

book shelf unit] Ah ha! Do you want to get this one - *Mooncake*?
 That's the same bear that's in *Happy Birthday Moon*.
 Fatima: [Excited] Ya!
 Mother. OK.

Mothers were not the only source of reader's advice. Whitney (E1) received this council from OC1 (Other Child 1, female, about seven years):

OC1: Do you need any help with your books?
 Whitney: Want to see my books..see if these books are any good.
 OC1: I'll tell you what this is called. *The Tale of Mr. Toad [Tod]*.
 Whitney: Toad? I'm not gonna pick that one.
 OC1: Those aren't..those aren't kids' books. Down here are. This one..
 Whitney: It is called..[bewildered] There is no numbers for it.
 OC1: The title is right here. *The Tale of Little Pig*...I don't know what that word says [*Robinson*].
 Whitney: Here's one. Here's one.
 OC1:I have read some of these books. *The Tale of Timmy Tippers [Tiptoes]*. I know that book. Those are good books.

OC1 was an adept reader's advisor. Although very young, she used many elements of model reader's advisory interviews including offering to help ("Do you need any help with your books?"), providing information ("The title is right here."), directing her user to suitable materials ("those aren't kids books. Down here are."), and recommending a particular title ("*The Tale of Timmy Tippers*. I know that book. Those are good books.").

Madeline (C8) became a reader's advisor herself by introducing a three month old baby to the board book collection at Site C.

While many of the children, like Elissa and Danielle, browsed shelves, racks, bins and displays to find what they wanted, some also (or only) had very specific author, title or subject requests which I regarded as reference questions.

Gillian (E6) knew exactly what she wanted and was singleminded in her emphasis on the desired title.

Gillian: Oh. Can, can we look for *The Cake That Mack Ate*?
 Mother: Yes. We can look for *The Cake That Mack Ate*. Would you like to come to the computers with me?
 Gillian: Yes.
 Mother: OK.
 Gillian: And can we look for *The Cake That Mack Ate*?
 Mother: What we have to do is we have to put the name of the book into the computer. And the computer will tell us if this library has it. Or if maybe another library has it. OK?
 Gillian: Then, then..Then *The Cake That Mack Ate*.
 Mother: Yes. Would you like to maybe look at some books while I'm...?
 Gillian: No. Because I want *The Cake That Mack Ate*.

(See pages 135-136 for evidence that this persistence paid off.) Like the incidents of reader's advisory, reference questions were related to experiences in the children's lives. Elizabeth (E2) explained this clearly in the follow-up interview.

Researcher: OK. On that day Elizabeth seemed to have a question about cicadas...those big bugs.
 Mother: Ya.
 Researcher: So, I'm curious about how that arose.
 Mother: Oh.
 Researcher: Where the question came from. If you can remember.
 Mother: Elizabeth and, I think. [To Elizabeth] Were you at [the park]?
 And Daddy was talking to you about cicadas.
 Elizabeth: Yes.
 Mother: And he wasn't sure what they actually looked like.
 Elizabeth: So he [Daddy] showed us in the book.
 Researcher. Oh. That's interesting.
 Elizabeth: He showed us how they looked. He showed us how they grew.

One of the surprising characteristics of the catalogue search (n=7), reference (n=21) and reader's advisory (n=30) incidents that I observed was the lack of staff involvement. Only Elizabeth's question about cicadas was asked of and answered by a

staff member, a nonprofessional library assistant who did find the information. In my study the mothers and occasionally other library users like OC1 with Whitney, acted as professional librarians for the children. I suspect that this may be explained by the fact that staff seemed to be too busy with other duties which kept them out of the public service areas (other than the circulation desks) and so made them inaccessible to users, including the children and mothers in my study.

4.4.4 Using library materials

I observed the children using library materials in three ways during their library visits: they shared or read stories with others, they perused or browsed through books on their own, and one child viewed a video.

4.4.4.1 Reading stories

Requests to read stories were frequent. Sadako's (C3) request, made in an irresistible pleading tone of voice, was typical: "Mommy, read?"

An unexpected finding was the importance of mothers in reading stories. They were involved in most (seventy-two percent) of the story sharing episodes, which occurred in seventy percent of the library visits, usually during the book selection process. Story reading by staff, while accounting for eighteen percent of incidents, only happened during formal story time programs and only involved two of the thirty children. Chloe (C6), Emily (E7) and Sarah (J2) listened in on stories being read by other adults to other children.

When they were reading *A Chair for My Mother*, Jenna (C5) and her mother attracted a large group of daycare children on a class visit. As Jenna's mother said in

the follow-up interview: "[The daycare children] were trying not to but they couldn't help themselves." She, like Sadako's (C3) and Maggie's (S1) mothers who also had extended audiences for their story reading, confirmed that this widening of the audience had happened on other library visits as well.

Sadako's Mother: Quite often the children will drop by and listen a bit. And often they'll just end up leaving after a bit. But sometimes they stay the whole time and listen to the story...It doesn't bother me at all. Actually it's kind of nice. I like reading to children.

Mothers who did not read to their children at the library explained that there wasn't always time, the library was too busy, younger siblings interfered or there were too many other things to do while there. In fact, the six interrupted story sharing incidents that I observed were stopped for one or more of exactly these same reasons.

4.4.4.2 Perusing stories

One third of the children, like Madeline (C8) looked through books on their own. In this episode Madeline is using the book as a prop to "read" a story she knows so well that she has whole parts of it more or less memorized.

Mother: I got two books. OK?

Observation Note: Mother put the two books on the table. Mother went off. Madeline browsed through the books that mother had left. She carefully and slowly turned the pages and narrated the stories out loud to herself. Sound of pages turning.

Madeline: Once upon a time there were three billy goats..[In a troll like voice] You get off my bridge! Munch to munch to eat you...munch to munch...munch to munch...munch. A big troll...Down like this and that...[Second book] And they had a child.

Note how Madeline uses her knowledge of stories in general, and this story in particular, to help her with this "reading". She uses the ritual fairy tale opening "Once upon a time.." She uses the direct speech ("You get off my bridge!")

characteristic of the narrative style of this tale and a key phrase which is repeated in the plot of this story as each of the three billy goats crosses the bridge. Despite the noise and distractions, the children all concentrated intensely while perusing stories.

4.4.4.3 Listening to audio-recordings and viewing video-recordings

Although Lisa (C8) saw a video during her story time program, there were no facilities for listening to audio-recordings or viewing video-recordings independently during library visits.

4.4.5 Playing

Most of the children (86.7%) played at least a bit with the toys, puzzles and other play materials available at all four sites. Only one mother reported that her child hardly ever played while at the library. There was a lot of variation in terms of how much of the visit was devoted to play. Chloe (C6) spent most of her time playing while Genevieve (E8) only played for a minute or two. A wide variety of toys was available. While individual children had favourites which both the mothers and children were easily able to identify in the follow-up interviews, there were no general overall patterns of likes and dislikes that I was able to discern from the actual use of playthings during the library visits. However, new items in good condition received relatively more attention.

A couple of interesting concepts did emerge from my observation of the children playing in the library. First, like Elizabeth (E2), some of the children used the playthings to create their own stories. The felt board hanging on the wall in the children's area at Site E had felt cut-outs of fish and mittens. Elizabeth, inspired by

the mittens and using her knowledge of the story song "The Three Little Kittens Who Lost Their Mittens," soon created a new revised story.

Elizabeth: [At the felt board with Other Child 3, male, about two and one half years old] Want to play with me? You can have the mittens and the stars. Here. You can have all those. I'll have the pink mittens...I'll be the pink ones [referring to some fish] with the pink mittens who lost their mittens. That lost their mittens. This one had one mitten..and this one..these ones put their fingers in here. Three little fishes that lost their mitts...lost their mittens. That's our story.

Note how Elizabeth drew the younger child into her game with an invitation ("Want to play with me?") and an offer to share ("You can have..."). Elizabeth took control of the story by describing its new parameters ("fishes" instead of kittens) and setting the stage for what was to follow. She assigned herself a role ("I'll have the pink mittens"). She showed her expert knowledge by paraphrasing the familiar refrain from the story ("Three little fishes that lost their mitts...lost their mittens"). Once all these preparations were completed she provided a summary conclusion ("That's our story") that showed her understanding that she too was a story maker.

Secondly, children sometimes connected playthings with characters from children's literature. For example, Marissa (S5) called a toy turtle "Franklin," clearly linking it to the Franklin in the popular picture books by Paulette Bourgeois. Hannah (S7) and her mother took this linking of toys to books a step further. Hannah played with a puzzle which depicted a scene from *Madeline and the Bad Hat*. Then they had this conversation:

Mother: After this we can go look for a *Madeline* book if you want to.

Hannah: And..And find a *Madeline* book?

Mother: Uhm hmm.

Hannah: I mean a *Madeline* video.

Mother: OK.

They did find and borrow a *Madeline* video. The puzzle had acted as an access point to the literature. While encouraging children to create their own stories and linking children to stories in the library's collections are not the only appropriate roles for play materials in libraries (see Chapter Seven), careful selection of play things that are clearly linked to children's literature might provide more opportunities for these outcomes.

4.4.6 Interacting with others

Outside of their own family members I observed the children actively interacting socially with others in the library, passively interacting with others by watching them and interacting with staff.

4.4.6.1 Social interaction with others

Many of the girls (63.3%) actively interacted with others in the library. Only one mother indicated that her daughter seldom did this. Sometimes there were no other children there to play with. Maggie (S1) found overcrowding to be a problem: "I don't want to play there because there's a lot of kids there."

Much (58% of incidents) of interacting socially with others occurred while the children were playing. I was surprised to discover that about half of these incidents were at least partially negative experiences for the children. There was quite a bit of fighting as in this episode where Alexis (E5) and another child named Timmy (male, about five years old) tried to play together with some wooden blocks and a train set.

Timmy: Let's play with the train.

Alexis: What?

Timmy: Let's play with the train instead.

Alexis: No.

Timmy: It has long tracks. Now, that there's a train.

Alexis: Well, I want to do a castle.

Timmy: Well castles are not good.

Alexis: Yes they are. Those kind of castles. Makes me so happy when I got a castle.

Timmy: I'm gonna make a train. [Sound of blocks and train pieces banging] I hope you know you don't know what I'm making. [Sound of blocks and train pieces banging] Should I put this one around it? And that can be the road on top of the..on top of the..on top of the track. Should it? Would it? So let's do it.

Alexis: Well, I'm making a..

Timmy: There it is. The road.. Well, its..

Alexis: Your track looks funny. [calling] Mom. Mom.

Mother: Yes. What?

Alexis: He broke that. Because he didn't want to help me make it all over again.

As can be seen from this excerpt from the follow-up interview transcript, Lisa (C7) knew exactly why she did not always like to play with other children at the library.

Researcher: Lisa did not play very much with other children during the library visit. Is this usual?

Mother: It varies. Sometimes she does and sometimes she doesn't.

Lisa: [Calling from across the room] Ya. And people don't share enough. People don't share enough. And stuff like that.

Mother: OK. If you want to tell her, if you want to tell her you have to come over here and tell her exactly what you mean.

Researcher: You're telling me that you don't like it when the other kids don't share?

Lisa: Yes. And you know what happens? Some kids they grab toys out of your hands. Ya.

Time and time again I observed children guarding their own or library playthings, even stashing them away in hiding places so that others could not find them. Mothers were not always aware about the conflicts that happened while their children played with others. Sometimes, I did not realize it myself until after I had listened to the recorded talk.

Children and their families varied in terms of how much they valued the opportunity to interact with others. Typically, if a child had one or more siblings or attended junior kindergarten or another group activity, social interaction was not as high a priority as it was for only or oldest children. As Hannah's (S7) mother indicated, it was seldom noted as the most important reason for coming to the library.

Mother: I suppose that's why I do outings you know, in the first place. Or I shouldn't say..that's not the only reason. The number one priority at the library probably would be just to get those stimulating materials. If you went and it was a drive through I would still go to get the materials. But it's fun to go out. Have an environment that you assume people are friendly because they all use books.

4.4.6.2 Observation

Some of the children (36.7%) spent time watching other children. This incident with Raya (C1) was typical:

Observation Note: Three other children are playing with the BRIO train set which is right beside the table where Raya and her [six year old] sister are. The older boy (about seven years) directs the play of the two younger ones (female, about four years; female, about twenty-three months), giving directions, telling them how to move their trains, settling disputes. Raya went over to watch the children. She leaned against the table and looked at them quite intently. Sister continues to count quietly to four and eventually to ten in the background while the other children play with the train. Goes on for a long time, about five minutes, while Raya watches intently. Can hear Raya breathing on tape while this is happening. Sister joined Raya briefly to watch the children but then returned to sit at the table and try the "I Know an Old Woman Who Lives in a Shoe" puzzle. At this point Raya reached behind her to finger a puzzle but continued to watch the children. Meanwhile Mother remained in the nonfiction area, looking up occasionally to check on the children.

While most of the watchers were also active social interactors, two of the children, Elizabeth (C4) and Chloe (C6), did very little active interaction but had multiple

incidents of watching. Alexis's (E4) mother offered this explanation for her daughter's observation of others:

Mother: She watches. And then when she feels comfortable I guess with them, she'll..um..play with them.

4.4.6.3 Staff interaction

Interactions with staff members were usually quite short and often, as Hannah's (S7) mother told me, quite general in nature.

Researcher: Except for very briefly once, Hannah did not interact with staff at all. Is this usual?

Mother: Ya, pretty usual. She'll..If [Staff3, Professional Librarian, Children's services] comes over, she'll talk to [Staff3]. She might say, we're having macaroni for lunch. Something along those lines. But in terms of asking staff questions about the books, I don't think she usually would, no.

Hannah knew Staff3 from attending story times. A number of mothers told me that, outside of checkout, their children only interacted with staff members that they knew through something like a library program.

Sacha's (J3) mother gave another reason for the lack of interaction: "Usually find they're fairly busy...They're not unfriendly. They're just busy...It's usually apparent there aren't enough of them." Jenna's (C5) mother attributed this to the set up of the library: "They weren't really out in the main part of the library. They were all pretty much behind the counter." In most cases it was difficult for me to judge how busy the library staff were. However, I did keep track of where they were and can confirm that they were almost always in work rooms or behind the circulation desk.

During my study, staff came out from behind the counter a couple of times to

discipline children like Ruthie (S6) and her sister who were playing hide-and-go-seek.

Staff3: [Sternly] You can not run in here. You can not run in here.

OK?

Ruthie: OK.

Staff3: Thank you.

In both the cases I observed, the discipline was appropriate and essential for keeping the children safe.

One third of the interactions with staff occurred at check out. However, conversations like the one between Emily (E7) and Staff1 described in section 4.4.2 (in which Staff1 asked some questions about books) were rare. The norm was a pleasant exchange about macaroni, Hallowe'en costumes or the nice bear on a child's shirt.

Many interactions happened during formal programs (thirty-four or 51.5%). These were usually brief and involved interaction between the librarian and the group rather than individual children. One notable exception was Madeline's (C8) book report.

Staff1 [Professional librarian, Children's services]: Can you tell me about what you read?

Madeline: [Holding up a book] Look.

Staff1: I can see inside. Can you tell me about what you read?

Madeline: [Holding up another book] Look.

Mother: We'll do one at a time, OK?

Staff1: Ya. Let's do one at a time. Good idea Mom. Let's do this one. Oh. That's wonderful.

Madeline; [Shouting] Dragon!

Staff1: A dragon. You love dragons? [Reading the title] *The Dinosaur Who lived in My backyard* by B.J. Hennesey, pictures by Susan Davis. And that's this book, isn't it?

Madeline: Uhm hmm. And I loved it.

Staff1: And you loved it. And I can see that by this pig's face [Note - As a part of their report children were to draw a happy face on a pig if

they liked the story and a sad face if they didn't.) All those wonderful colours. [Referring to the picture Madeline drew in her book report]

And can you tell me about your illustrations?

Madeline: Flower.

Staff1: This says lima beans. Do you have lima beans in your garden? Did you help your Daddy plant them?

Madeline: Hmmm?

Mother: What do you have that's green that you like to eat right out of the garden?

Madeline: I don't know...[shouting] Peas!

Staff1: Peas. Wonderful. So is this an illustration from the book? So are the lima beans in the story?

Madeline: I want my prize now!

Mother: Well Madeline you tell her about this part. What's this that you drew here?

Madeline: The tree.

Staff1: Uh huh. That's a tree.

Mother: And what's the red one?

Madeline: Kite.

Staff1: Kite in a tree. Why is the kite in the tree? Did it get stuck?

Madeline: Uhm hmm. Didn't let go.

Staff1: What happens to the dinosaur in the backyard?

Madeline: I don't know.

Staff1: [Stands the book on the table so Madeline can see it and begins to look through, discuss and read a few bits from the story.] There's the dinosaur. But there's no dinosaur there?...[Sound of pages being turned] [Surprised] Ah! Do you see the dinosaur? Did the baby dinosaur get born?

Madeline: Ya.

Staff1: You're right. Oh look - it's a birthday. [Reading from book] "By the time he was five he was as big as our car." Would you like to have a dinosaur in your backyard Madeline?

Madeline: Yes.

Staff1: Wouldn't that be fun.

Madeline: Where's the dog?

Staff1: The dog fell into the footprint. For goodness sake. So you really loved this story? All right. I loved it too. Which other one did you do?

Library staff are clearly wonderful resources for children. Unfortunately they were largely inaccessible to them in the visits that I observed.

4.4.7 Doing a library activity

Two thirds of the children participated in special activities organized or conducted by library staff for them.

4.4.7.1 Formal programs

Six (20%) of the children participated in formally organized (requiring preregistration and offered at set times) programs. Lisa (C7) and Laura (J1) attended a session of preschool story time. Laura also attended her brother's baby story time session. Jenna (C5) and Madeline (C8) made book reports during the library's summer reading program. Sacha (J3) borrowed toys from the toy library. Sarah (J2) attended a nursery school session. Both the toy library and the nursery school were programs that the library offered through co-sponsorship with another city agency serving preschool children.

While I did not ask all the mothers, data recorded in the screening interview field notes, diary transcripts and follow-up interviews indicates that at least seventeen more of the children had participated in a formal library program at some time. Overall, I concluded that young children who use public libraries are likely to participate in its formal programming.

4.4.7.2 Informal programs

In this category I included activities which were prepared and offered by staff for children to do on a drop-in basis. During the study at Sites C and E children could make book marks with rubber stamps at the circulation desks. The libraries provided paper, ink pads and rubber stamps. The children were allowed to press the

rubber stamp on the ink pad and then make a print on the paper. Jenna's (C5) delight in this activity was typical.

Jenna: Stamps. I want to stamp. I want to stamp. I want a stamp. I want a stamp on my hand. I want a stamp. Can I have a stamp? Can I have a stamp? Stamp. Stamp. Can I have a stamp? Can I have a stamp? Can I have a stamp?

Mother: Can I stamp her hand?

Staff4: Oh sure.

...

Mother: OK. That's wonderful.

Jenna: [Delightfully] Huh!

Mother: How about this one?

Jenna: Ya. Ya.

Mother: There you go.

Staff4: [Handing Jenna a teddy bear rubber stamp] There's the bear. You can stamp on the paper. You can make a book mark if you like. Would you like to do that?

Jenna: Yes. Can I have the little thing? The stamp.

Mother: Do you want to stamp on the piece of paper?

Jenna: [Pressing hard] Whooo..whooo..

Mother: That's better than doing your hand.

Observation Note: Jenna continues to make grunting sounds as she stamps hard while mother talks with Staff4 in the background.

Mother: OK. Stick that in one of the books.

All of the girls made bookmarks at Site E and half at Site C. Maggie (S1), who also goes to Site C, demanded and was allowed to use the library's date stamp, to make a bookmark during her visit at Site S. This informal program was simple and inexpensive. The children loved it and it provided an excellent opportunity for interacting with library staff.

4.4.7.3 Exhibits

Exhibit material frequently attracted the children's attention. Most incidents (76%) occurred at one site. Site C has a resident rabbit which was visited by five of the girls. Site C also mounts temporary, changing displays. The children actively and

unfailingly viewed these when available. So, Sadako (C3) investigated the Easter basket on the reference desk, Lisa (C7) looked carefully at a cricket in a terrarium and checked a display of children's art, and Madeline (C8) viewed a photography exhibit.

4.4.8 Using support facilities

While only four children used washrooms and one a water fountain during their library visits, the follow-up interviews with the mothers indicated that ready access to washroom facilities was very important to both their children and themselves. I was surprised to discover that the children liked using the washroom, especially the child-size family washroom at Site C. Chloe (C6) became very excited when she saw the child-size fixtures (toilet and sink).

Chloe: [In an excited voice] Hey! This is great! This is really great.

Mother: [Referring to the toilet] Ya, that's your height, isn't it?

Chloe: Ya, it is. I can't believe it's my height.

Mothers, like Genevieve's (E8) confirmed this general interest.

Researcher: You didn't use the washrooms while in the library. Is this usual?

Mother: Oh heavens, no! [Loud laughter]

...

And I don't think that there's a water fountain there that we were able to sample several times either.

Researcher: Nope. There isn't one in that location.

Mother: Oh see, we know where our washrooms and water fountains are.

Site S, the mall branch library, has no public washrooms. Rebecca's (S4) visit was cut short when her younger sister had to go to the bathroom. Most of the other mothers reported having had similar problems on other visits. One of the Site S

mothers explained the problems in the follow-up interview.

Mother: It's a big problem. I have to put diapers..I put diapers on them past toilet training so that..It's too much trouble to go to the washroom at the mall. It's too much trouble. I would rather bring them home. Because if I have to bring them through the mall, then I have to deal with wanting to have things in the mall.

...

It's easier for me to go back out the door, go in the car and go home. At one point I used to keep a potty in the car if they had to pee. To avoid going through the mall.

...

The other thing I've done a couple of times is I've nonchalantly walked into the doctor's office across the hall.

Washrooms then appear to be both interesting and essential.

4.5 Concluding remarks

During their library visits the children were very busy choosing and borrowing library materials, sharing stories with their mothers, looking through books on their own, taking part in library activities like programs, playing with toys and interacting with other children. None of these activities is surprising. They reflect commonly stated purposes of and services routinely provided by children's libraries. The findings of this study suggest that preschool children actually are using the library in ways that the library profession has intended. It was reassuring to note the central place that stories and other library materials had throughout the visits. Libraries may wish to reinforce the important role of story provision by ensuring that other services they provide such as programs, toys and displays are linked to their collections. It was somewhat disappointing to see that library staff, experts in stories and information for children, were not often available to the children and their families.

Instead it was the mothers, who helped the children select books, answered their questions and shared stories with them, who were essential for their daughters' successful and satisfying use of the library. Children's libraries may wish to undertake measures that will support the mothers in this work. For example, libraries may wish to make sure that they provide suitable (comfortable, reasonably quiet) space for parents to read with their preschool children. Other suggestions are included in the implications section of this report.

In the next chapter we will look at the library-related activities which happened at home and elsewhere in the week after the children's library visits.

CHAPTER FIVE - THE LIBRARY GOES HOME

5.1 Introduction

I was unable to identify any research that described the role or the presence of the public library in young children's lives while they were not at the library. How do children use library materials outside the library? What other kinds of activities, related to the child's use of the library, occur outside the library?

In my study, the children's mothers acted as researchers, observing and recording library-related behaviour in the week following their library visits (see sections 3.5 and 3.6). Chloe's (C6) mother, a writer by profession, kept a detailed diary. She made the following entry on the evening of Chloe's library visit:

Diary entry: 7:00 [p.m.] is [b]edtime and we always read books from the library. [T]he books stay in the bag until we read them. We ceremoniously "draw" the books out and read them randomly. This has given us a way to avoid disputes about what books to read. This method leaves everything to chance. We read: *Chicago and the Cat: The Camping Trip / Henry's Christmas Star / The Golly Sisters Ride Again.*

In the follow-up interview Chloe's mother told me that *The Golly Sisters* books, a series of humorous easy-to-read stories, are among their favourites. This had been a very lucky draw. While not all the children used such a suspense charged method for choosing library materials to use, I did discover that they made heavy use of what they had borrowed, seeming especially to enjoy shared reading with others.

The children used the library materials in other activities as well, including integrating their content into play. Fatima (J5) and her younger brother David had

borrowed two versions of *Rapunzel*. Fatima's mother captured this incident in her diary:

Diary entry:

David: [Referring to a story in a video that they had borrowed and watched] You want to be mole and I be mouse?

Fatima: No, I'm going to be Rapunzel.

David: Punzel. Punzel.

Fatima: I'm locked up in the witch's castle.

David: Let down your hair.

Fatima: You be the witch.

David: You Punzel, right?

I was also surprised to see that these families were such heavy users of the library. Over half returned one or more times in the week following their study visits.

5.2 Sources and credibility of data

The mother's diaries and transcripts of the follow-up interviews were analyzed and coded for incidents of library-related behaviour. The code book for this analysis is included as Appendix IX.3. The test of inter-coder reliability based on four randomly chosen cases resulted in an agreement rate of 94.2% between me and the volunteer coder.

I asked the mothers questions about the typicality of specific activities they had noted in the diaries. I was not as consistent and thorough in doing this as I was with the typicality questions I asked about library visit activities. Since my first reading of the diaries took place during the follow-up interviews, I did not have as much time to review and think about them before the interview as I did the visit transcripts. When asked, the mothers generally confirmed that the behaviour they had seen was usual or

fairly usual.

Participating in the study may have created an increased interest in the library for both the children and the mothers. This may have resulted in more library-related activities than usual in the week following the visits. A few mothers actually reported less activity because of unusual circumstances like illness, being away from home or the celebration of a holiday. It is also likely that some activities were under reported simply because the mothers were not there to observe them. This could be especially true for independent behaviour, like perusing a book, as opposed to activities requiring the collaboration of an adult, like reading a book together. Overall, while the amount of activity reported may not be usual, I have no reason to suspect that the range of types of activities reported was different from those that usually occur.

5.3 Library-related activities which happened after the library visit

5.3.1 General

My analysis of the mothers' diaries indicates that preschool girls engage in some or all of the following library-related activities in the week after a visit to the public library:

- Activities related to library materials
- Read or listen to a book being read by another
- Peruse or look through a book
- View a video-recording
- Listen to an audio-recording
- Talk about library materials
- Use the content of library materials in play
- Other - e.g. sleep with library materials

Activities related to other aspects of the library

- Talk about the library
- Make another visit to a library
- Play library
- Other - e.g. complete a craft started at story time.

Definitions of each activity are included in the Home Use Code Manual (Appendix IX.3).

Data are summarized for all thirty girls in Table X. The total number of incidents of each type of activity across the entire study sample ($n=30$) is presented in column one. The second column expresses the number of incidents for each type of activity as a percentage of the total number of all incidents of all types of activities. The average number of incidents of each type of activity per case is reported in the third column. The fourth column indicates the number of individual cases in which at least one incident of an activity type took place. This is expressed as a percentage of the total number of cases ($n=30$) in the last column. For example, thirty girls (100% of all cases) were read to in the week following their visit to the library during a total of 218 incidents of book reading (representing 45.2% of all 482 incidents of post-visit library-related activities) or an average of 7.3 incidents of reading per case.

TABLE X
POST-VISIT LIBRARY-RELATED ACTIVITIES

Activities	Incidents		Mean No. Per Case (n=30)	Cases	
	No.	%		No.	%
Materials					
Read	218	45.2	7.3	30	100.0
Peruse	37	7.7	1.2	15	50.0
View	47	9.8	1.6	14	46.7
Listen	13	2.7	.4	5	16.7
Play	30	6.2	1.0	12	40.0
Talk	36	7.5	1.2	13	43.3
Other	31	6.4	1.0	11	36.7
(Total)	(412)	(85.5)	(13.7)		
Library					
Talk	24	4.9	.8	16	53.3
Visit	25	5.2	.8	17	56.7
Play	4	.9	.1	3	10.0
Other	17	3.5	.6	7	23.3
(Total)	(70)	(14.5)	(2.3)		
Total	482	100.0	16.1		

Data are summarized for subjects from each site in Table XI. Table XI - A reports the number of incidents of each type of activity for each site in the first column under each site heading. This is expressed as a percentage of the total number of incidents of all types of activity for subjects from that site in the second column under the site heading. In the first column under each site heading Table XI - B reports the number of cases per site in which at least one incident of an activity happened. This is expressed as a percentage of the total number of cases for subjects

from each site in the second column under each site heading. For example, nine incidents of talking about the library were recorded in the Site C diaries. This represents 7.0% of all 128 post-visit library-related activities associated with Site C subjects. However, only four of the eight children, or 50% of all eight cases at Site C, talked about the library after their visit. These four children account for all ten Site C incidents of talking about the library.

Although the number of subjects per site was too small for a statistical analysis of differences between sites, a general review of the data suggests no startling differences.

Detailed information about post-visit library-related activities for each subject is included in Appendix X.

TABLE XI - A
POST-VISIT LIBRARY-RELATED ACTIVITIES - NUMBER OF INCIDENTS BY SITE

Activity	Incidents											
	Site C		Site E		Site J		Site S		Total			
	No.	%	No.	%	No.	%	No.	%	No.	%		
Materials	73	57.0	70	50.0	43	35.0	32	35.1	218	45.2		
Read	4	3.1	11	7.9	14	11.4	8	8.8	37	7.7		
Peruse	10	7.8	16	11.4	10	8.1	11	12.1	47	9.8		
View	0	0.0	7	5.0	3	2.4	3	3.3	13	2.7		
Listen	5	3.9	4	2.9	10	8.1	11	12.1	30	6.2		
Play	7	5.6	7	5.0	15	12.2	7	7.7	36	7.5		
Talk	2	1.6	15	10.7	9	7.3	5	5.5	31	6.4		
Library	9	7.0	3	2.1	6	4.9	6	6.6	24	4.9		
Talk	9	7.0	5	3.6	7	5.7	4	4.4	25	5.2		
Visit	1	0.8	0	0.0	1	0.8	2	2.2	4	0.9		
Play	8	6.3	2	1.4	5	4.1	2	2.2	17	3.5		
Total	128	100.0	140	100.0	123	100.0	91	100.0	482	100.0		

TABLE XI - B
POST-VISIT LIBRARY-RELATED ACTIVITIES - NUMBER OF CASES PER SITE

Activity	Cases											
	Site C (n=8)		Site E (n=8)		Site J (n=7)		Site S (n=7)		Total (n=30)			
	No.	%	No.	%	No.	%	No.	%	No.	%		
Materials												
Read	8	100.0	8	100.0	7	100.0	7	100.0	30	100.0		
Peruse	3	37.5	4	50.0	4	57.1	4	57.1	15	50.0		
View	2	25.0	4	50.0	3	42.9	5	71.4	14	46.7		
Listen	0	0.0	2	25.0	2	28.6	1	14.3	5	16.7		
Play	4	50.0	3	37.5	4	57.1	1	14.3	12	40.0		
Talk	3	37.5	3	37.5	4	57.1	3	42.9	13	43.3		
Other	2	25.0	4	50.0	2	28.6	3	42.9	11	36.7		
Library												
Talk	4	50.0	2	25.5	6	85.7	4	57.1	16	53.3		
Visit	6	75.0	3	37.5	6	85.7	2	28.6	17	56.7		
Play	1	12.5	0	0.0	1	14.3	1	14.3	3	10.0		
Other	3	37.5	1	12.5	1	14.3	2	28.6	7	23.3		

5.3.2 Using library materials

5.3.2.1 Do children use the materials they borrow?

Twenty of the children (66.7%) used every item they borrowed at least once in the week following their library visit. The remaining ten (33.3%) used most, which I defined as at least 75% of items borrowed. Eight of the children who did not use everything, borrowed more than the median of seven items. The loan period was three weeks and the mothers of the children who borrowed a lot indicated they usually used all or most items although not necessarily in the first week. Sometimes children, like Sarah (J2), simply did not like something they had borrowed.

Researcher: Is it typical for you to use all of the materials that you borrow?

Sarah's Mother: Sometimes. Sometimes she'll just say I don't like that book at all. So she won't read it. *A World Full of Monsters* we didn't read very many times. I think only once. And she didn't really like that one too much.

Occasionally items were borrowed which turned out to be inappropriate. Antje's (E3) mother explained why they did not use one book.

Mother: We didn't use um.. *The Immaculate*..what is it? *The Immaculate Impossible*?

Researcher: *The Glorious Impossible*.

Mother: *The Glorious Impossible*. I paged through it. We didn't use that one.

Researcher: OK. I don't know that one. Madeleine L'Engle [author] stuff tends to be longer though.

Mother: Well, that one was very long and involved. It wasn't a children's book really.

Researcher: OK.

Mother: It was more an adult book.

Librarians have always regarded circulation statistics to be poor indicators, which tend to over estimate actual use. These findings indicate that this may not be

true for materials for young children. In fact, circulation statistics may under represent use. Reading incidents in this study almost always involved two readers, the child and a parent, and even more when siblings were present. Picture books are short. The mothers told me that they almost always read all of a book. Many of the children read individual titles more than once, something which would be quite rare for an adult borrower to do with a four hundred page novel. From the American Library Association's analysis of the data it collects annually about public libraries in North America, we already know that children borrow about twice as many books per capita as adults (Zweizig 1993). If, as my data suggest, children are also using this material more, public libraries may need to reconsider how they allocate their materials budgets.

5.3.2.2 Reading

Reading was the most prominent post-visit library-related activity noted by the mothers. It was the only thing that all thirty of the girls did, accounting for 45.2% of all library-related incidents.

The most important thing that I observed during story sharing at the library and something that the mothers also reported about story sharing at home, was the opportunities for learning and making sense of one's world that arose through reading. Chapters Six, Seven and Eight explore these themes. Other general trends which emerged from the data are reported in this chapter.

On the day after their visit to the library, Emily's (E7) mother noted this episode of reading which took place at around 3:30 p.m. and was typical of other

episodes described by other mothers.

[Diary Entry]: Watched *Thomas* video. After it was over she [Emily] said "Book time. I love this one" so we read *Curious George Visits a Police Station* aloud. Then she said "This one is funnier" when she brought me *Curious George and the Dump Truck*. We read it and she said "Just one more" so we read *Curious George Goes Camping*. Next she said "I'm going to see if I can find one more." Of course she could, so we read *Babar and His Children*.

Like Emily, many of the other children initiated reading sessions although parents were also likely to do this.

Most of the children had reading built into their daily routines. While not always clear from the information recorded in the diaries, a lot of reading (39.4% of incidents) took place at naptimes and bedtimes. Kaitlyn's (J6) mother described her bedtime ritual this way.

Kaitlyn's Mother: She's used to it now so she goes to bed a lot better. So she knows: brush your teeth, then sing a song, then read a book, then go to bed.

Story reading was used to calm children down, to fill in time while waiting for something and, of course, also as a pleasant thing to do throughout the day.

When did reading not happen? The mothers did not note many examples of this. Three of the children "lost" stories because of naughty behaviour. Lisa's (C7) mother reported that she did not have time to read once when she was asked.

Fatima's (J5) mother, after having read four stories and having watched two library videos with Fatima and her younger brother, had this conversation with her daughter.

Diary entry:
 Mother: Okay, bedtime.
 Fatima: Can I read one more story?
 Mother: You can read one in bed.

Fatima: You never read me any stories!

Mother: We read a lot of books and watched some movies. I have a sore throat and can't read any more tonight. You can take a book to bed.

I was able to tell who had done the reading in most (85.5%) of the incidents recorded in the diaries. Sometimes, especially if they knew a book well, the children themselves "read" stories to others. There were also a few incidents involving child caregivers, neighbours and relatives. Not surprisingly, mothers (51.4% of incidents) and fathers (17.0%) accounted for most of the reading. It was interesting to see how sharing stories was used to build the relationship between the reader and the child.

Catherine's (C4) mother described the following scene between Catherine and her grandmother.

Diary entry: Tuesday, April 12 5:30 pm
Preparing a beautiful meal for Grandma and Grandpa. Grandma asks Catherine if she would like Grandma to read to Meredith [younger sibling, about 22 months old] and Catherine (while mother gets dinner on the table!) Catherine goes up to her room where the library books are always kept (beside her bed) and returns with Leslie Brooke's *Nursery Rhyme Picture Book*. The 2 of them enjoy Grandma's closeness and her version of "Simple Simon."

Emily's (E7) mother noted that:

Diary entry: Emily usually uses books as a method of getting to know people. After they have been here a while she'll go get a book to read to her.

This must be true as Emily asked me to read a story to her during the follow-up interview. (We shared *Curious George Takes a Job*.) Of course, sharing stories also brings children and their parents closer together. Fatima's (J5) mother had made a point of finding a copy of *Mike Mulligan and His Steam Shovel* for Fatima who had

asked for it but been unable to borrow it on their library visit because it was not on the shelf at that time. When her mother gave her the book a few days later, Fatima said "Mom, thanks for *Mike Mulligan*. I love you."

The large number of incidents of story sharing occurring at all sorts of times, in all sorts of contexts with all sorts of people, indicates to me that children and their families value the materials available through the public library that provide the opportunity for this sharing of stories.

5.3.2.3 Perusing books

Only half of the children looked through or perused books. This browsing activity, usually done independently from the mothers, may have been under reported because it was not always observed. Note, however, that the information in the diaries is consistent with the children's actions during the library visits where incidents of reading also outnumbered incidents of perusing books.

Browsing seemed to be a usual activity for about half of the children who did it. Sometimes it was built into daily routines. For example, Sarah (J2) and Fatima (J5) looked at books for a few minutes before going to sleep. Other children, like Kim (J3), seemed only to look at materials on their own when a parent, busy with other tasks, was not available to read to them.

Diary Entry: After our visit to the library I had some errands to run so Kim looked at all three books while driving.

The data suggest that many preschool girls prefer shared reading over independent use of books. It is likely that children need to share a story with adults one or more times before they can use it independently in a meaningful way.

5.3.2.4 Using audio-visual materials

All of the children who borrowed videos, viewed them. In fact, these were frequently requested as soon as a child arrived home from the library. Gillian's (E6) mother expressed this well.

Diary Entry: 11:30 a.m. - As soon as we get home from the library, she wants to watch the *Barney* video. Grudgingly agrees to eat first.

Unlike books, whose text was not yet accessible to the girls without help, videos could be and were used independently. A shorter loan period and a limit on the number that could be borrowed (usually two or three) may have made them seem scarce and therefore desirable. Fatima's (J5) mother noted that she used videos as babysitters so that she could complete other chores, like preparing supper. Hannah's (S7) mother said the same thing but added that videos borrowed from the library had at least been vetted by virtue of their having been selected by library staff. "I couldn't do that with television. I would feel very insecure right now at their age letting them watch stuff."

Fewer children borrowed audio-recordings. All, except for Ruthie (S6) who got a multi-media kit whose audio-cassette did not match the book, used the tapes at home. Again, children were able to use this medium independently and mothers valued this because it gave both themselves and the children an opportunity for quiet time alone.

Even though over half of this library's collection of nonprint materials consisted of audio or visual presentations of children's literature only one mother,

Fatima's (J5), consciously tried to link nonprint media with books.

Mother: I had just brought that one (book) home. Because it was one of the stories from one of the videos that they had chosen. Which one was it? It was the *Animal Stories* video.

Researcher: So, do you do that often?

Mother: Yes. Yes I do. I try to bring..I always try to bring books home that match the videos.

Researcher: That match the videos? And the reverse sometimes? If you see a video that's a story, or that's come from one?

Mother: Uhm hmm.

One of the implications of this study is that libraries may want to emphasize nonprint collections more. Young children find them exciting and interesting. Parents value them because they can be used independently. Audio-visual materials can promote and enrich the print collections. Library staff may need to make these links clearer to parents through strategies like displaying books and audio-visual material together, preparing pathfinders and bibliographies that list materials in different formats or using multiple formats of the same story in consecutive story time sessions.

5.3.2.5 Library materials and play

The mothers observed their children using stories as the raw material for imaginative play. Late one afternoon Hannah (S7) and her mother played hospital using Hannah's stuffed animals as patients. They also used bits and pieces of two stories, a video called *Sesame Street Visits the Hospital* and a book called *Curious George Goes to the Hospital*. In the story, Curious George is at the hospital because he has broken his leg. In the bed beside him is a shy little girl named Betsy.

Diary entry: [Written in margin] B Bird = very large, stuffed 1 with

one eye missing

[Quoting Hannah's talk] "I'm Noria (= Maria, a character in *Sesame Street Goes to the Hospital*) & I'm bringing Big Bird to the Hospital. He has a little bird in his chest, and his eye is missing & his throat is sore. You be the doctor." I examine him: he is very sick. I administer medicine & admit him to hospital. But we have to find him a bed...Hannah wants to know who is sleeping in each bed.

Mother: "This is the children's room - see there's Curious George; he broke his leg." (Curious George too is a stuffed toy).

Hannah: "Big Bird wants to sleep next to Betsy."

The stories, which both Hannah and her mother knew because they had viewed and read them together, provided a commonly understood platform to fuel the play.

There were thirty instances of play arising from stories involving twelve different children. Antje (E3), her older sister and a friend acted out *Beauty and the Beast*, using the pictures in the library book to script their play. In a bowl borrowed from the toy library collection, Fatima (J5) and her younger brother mixed up morning cakes while chanting "Milk in the batter, milk in the batter...", the verse chanted by the three bakers in Maurice Sendak's picture book *In the Night Kitchen* which the children had out on loan from the library. Elizabeth (E2) pretended she was the white horse in the story *The Year at Maple Hill Farm*. She did it again during the follow-up interview, neighing as she trotted around the living room.

5.3.2.6 Talking about library materials

The mothers noted a variety of conversations about library materials.

Sometimes the children, like Lesley (J4) in a telephone conversation with her aunt, told others about the content of materials.

Diary entry: ..and gave Aunt Judi [a version of] *Jesse Bear's Yum Yum Crumble* with quite detailed relating back to her own messes at the table.

The children also talked about wanting to borrow certain titles and returning (or more usually not wanting to return) others. Walking to daycare one morning, Fatima (J5) had this conversation with her mother and younger brother David (two and a half years old).

Diary entry:
 David: Can you get the pea movie?
 Mother: Which one do you mean?
 David: The pea movie.
 Fatima: He means *The Princess and the Pea*.
 Mother: Is that right, David?
 David: That's right!
 Fatima: Can you get the "fair" movie?
 Mother: *State Fair*?
 Fatima: Yes that one.
 Mother: Okay.

Sometimes the parents talked about the children's books. Raya's (C1) mother made this entry in her diary.

Diary entry. Moti [Raya's father] and I went away for the first night away from the kids for 6 years! I discussed the book *How the Forest Grew* with Moti!

Some of the conversations included questions about or reflections on the content of the material. This theme is addressed in Chapters Six, Seven and Eight.

All the conversations arose spontaneously in the course of ordinary day-to-day activities, indicating how much stories were interwoven into the lives of the children. The conversations about library materials also reflect how much they were valued by the children as can be seen from the following excerpt from the diary kept by Gillian's (E6) mother.

Diary entry:
 11 a.m. - On the way home from skating, [Gillian] says, "Mum, *The*

Cake That Mack Ate is waiting in the house for me," then brings the book to the table with her at snack time.

5.3.2.7 Other activities related to library materials

What else did the children do with library materials in the week following their library visit? Even though books are not at all as cuddly as stuffed animals or an old soft blanket, Whitney (E1), Antje (E3), Gillian (E6) and Fatima (J5) all slept with library books. The children who made visits to toy libraries played with the toys they had borrowed. Some of the children showed their library materials to fathers, siblings or friends who had not come along on the library visit. Library materials were carried around, often around the child's own house but also to church, to daycare, to a sleepover, to a friend's house and to a babysitter's house. Whitney's (E1) mother made this note in her diary.

Diary entry: This afternoon Whitney went to my sister-in-laws. After telling Whitney to put a couple of toys in her back-pack, she returned to the living room grinning. "All ready?" I asked. "Yes" she replied. "I have my library books." Of all the toys the 3 children have, this is what she felt was most important to her to take.

Again, this sort of behaviour clearly indicates how important library materials are to some young children.

5.3.3 Other aspects of library services

5.3.3.1 Talking about the library

Children and their families talked about the library. This entry from the diary kept by Lisa's [C7] mother describes a conversation which took place between Lisa and her father at the dinner table on the day of the study visit during which Lisa had

attended a session of preschool story time. *Norman the Doorman* is the title of a picture book by Don Freeman with which Lisa was familiar, although it had not been part of the story time.

Diary entry:

Father at dinner table: "Was it a good story time" - Lisa - "Yes I made a mouse I call Norman the Doorman - We sang a new Hello song to the teacher."

Children talked about what they had done at the library, and about when they might go again. It does not seem unusual for children like the ones in this study who were regular library users to talk about the library as they might about any other place they routinely visit.

5.3.3.2 Making another visit to a library

Seventeen of the children made a total of twenty-five library visits in the week after their study visits. The mothers' descriptions of these visits are consistent with what I observed during the study visits. While individual children may have done some different things, the range of activities over all cases was not different. For example, although she had not done this in the study visit, Elissa (C7) searched the catalogue on her second visit.

Diary entry:

2 pm - Went to [L***] library and Elissa spent the time in the children's area - looking at and choosing books. She played with the plastic animals and dinosaurs and set her books on the table in a pile "guarded" by the animals. She wanted to work on the computer and we got a stool she could stand on and she hit the buttons and picked up a scrap of paper and pencil and wrote some letters on it.

Three of the additional visits were quick stops to return materials. Fathers were present on four visits, confirming what the mothers had told me about their occasional

participation. Fourteen of the twenty-five visits took place in libraries different from those where the children had made their study visits, suggesting that they and their families use multiple locations. These additional library visits suggest that families with young children who use libraries are heavy users.

5.3.3.3 Playing library

Three of the children played library. Hannah (S7) pretended she was a librarian doing a story time. Sarah (J2) marked books in and out of her coffee table library. Catherine's (C4) mother reported this episode.

Diary Entry: After a short nap Catherine and Meredith [sibling, twenty-two months old] are playing in Catherine's room. Catherine says she works at the library and she is also a student. Miriam is a child visiting the library and Catherine stamps Miriam's books for her.

During the follow-up interview I witnessed another incident of library play by Catherine and recorded the following information in my field notes.

Observation Note: Catherine and Miriam began to play. Then they began to build a house from blankets and chairs in their parent's bedroom. They decided to fill the house with books. They made many trips upstairs to fetch books for the house. The house soon became a library. M [mother] and R [researcher] interacted with Catherine about this every time she went past with a load of books. After the interview R was invited to come to the library. I crawled in under the blankets. Catherine had decided that 6 or 7 children and one Mommy (R) could be members. The loan period was to be four days. Catherine stamped out the books with her magic wand. The dolls were lined up. They were children in the library and Catherine mentioned story time (although I was not clear whether the dolls were attending story time).

The appearance of library activities in some of the children's play points to how deeply they are immersed in the culture of library use. We know that childhood use of the library is an indicator of adult use later on (Powell, Taylor and McMillen

1984; Razzano 1985). These incidents of library play suggest that this enculturation process may begin when children are very young.

5.3.3.4 Other library-related activities

Other post-visit library-related activities included playing with or completing crafts made at story time, preparing book reports for the summer reading program, and recognizing and identifying libraries encountered on other outings.

5.4 Concluding remarks

The children in my study, through their heavy and joyful use of library materials and services both while at the library and while at home, make it clear that they enjoy and value these resources. But what about "The Preschoolers' Door to Learning"? Is there more to libraries than pleasure and recreation? The next three chapters look at if and how the public library provides opportunities for young children to learn.

CHAPTER SIX - OPENING THE PRESCHOOLERS' DOOR TO LEARNING

6.1 Introduction

Imagine the following scene. Antje (E3) and her older sister, Sydney (five years) are standing on step stools, elbows poised on the circulation desk counter, watching intently as Staff2 marks out their library materials. Their mother, having suddenly remembered that she had not chosen any books for the girls' older brother, is off in the juvenile fiction area quickly selecting a few novels. The check out proceeds routinely until Staff2 encounters a holiday book. The normal loan period in this library is three weeks but high demand items, like holiday books, have a shorter, one week loan period. The following conversation then occurs.

Staff2: The Christmas books go out for one week, OK?

Sydney: Christmas books for one week.

Staff2: That's right.

Antje: But, not...

Sydney: I'm going to tell my Mommy. [Sydney goes over to her mother in the juvenile fiction stacks area.]

Antje: ...the *Beauty and the Beast*.

Staff2: Not *Beauty and the Beast*. That's right. *Beauty and the Beast* goes out for three weeks.

Sydney: [Heard in the background from afar] Mommy. Christmas books for one week.

Antje: Same as these ones. Cause these are not Christmas books, are they?

Staff2: No, exactly.

Antje's conversation with Staff2 helped to increase her understanding of loan periods for library materials, an activity which also involved the subordinate process of understanding the library's category of "Christmas book."

All of the children in this study had opportunities for learning during their

library visits. Most (twenty-nine) of the mothers also reported library-related incidents of opportunities for learning in the week following their daughters' library visits. The learning opportunities were diverse. Those which arose from stories, the largest group, are discussed in depth in Chapter Eight. Learning opportunities related to other library services are covered in Chapter Seven. This chapter includes a definition of learning opportunity, a discussion of data sources and credibility, and a general summary and overview of all types of learning opportunities discovered in the study.

6.2 Learning opportunity - An operational definition

Many learning studies use a pre-test / post-test protocol designed to determine empirically if an individual has actually acquired some new knowledge or information. This approach would have been inappropriate for this study. As noted in Chapter One, very little is known about what, if anything, children learn through the use of public libraries. I chose to do an exploratory study that would identify, through the observation of children's naturally occurring behaviour, opportunities for learning.

Learning opportunity was defined as a chance for the child to increase her understanding in some area of knowledge. When trying to determine if a learning opportunity had occurred, I looked for evidence that the child either had been actively engaged in the process in some way or demonstrated some knowledge or skill in a subject area which would indicate that she had had an opportunity to learn about it. For example, a child may have been actively involved in an exchange of information such as listening while a mother explained what a word encountered in a story meant,

how to behave while in the library or how to put a puzzle together. A child may have shown that she understood or was trying to understand how libraries are organized by behaviour such as scanning spine labels for call numbers. While I could not always be sure that a child had really learned something, I was confident that she had had an opportunity to learn. Appendix IX.4, the Learning Opportunities Code Manual, expands on this definition.

6.3 Sources and credibility of data

The main data sources for this analysis were the library visit transcripts and the mothers' diaries. Transcripts of the follow-up interviews were also analyzed. Occasionally in the follow-up interviews mothers would provide information about something that had happened at home in the week following the library visit that they had not recorded in their diaries. They also expanded on or explained incidents that they had recorded or that I had observed in the library.

The data sources were coded for incidents of learning opportunities (see Tables XII and XIII) and whether the child was alone, with her mother or with someone else when a learning opportunity occurred (see Tables XV and XVI and section 6.5). The code book for this analysis is included as Appendix IX.4.

In terms of incidents of learning opportunities, an initial test of inter-coder reliability based on four cases resulted in agreement rates of 85.1% for the library visit transcripts, 90.0% for the mothers' diaries and 100% for the interview

transcripts.²³ While the rates were high enough to indicate that the coding scheme was reliable, I chose to look closely at the differences to see if they suggested any modifications that would strengthen the scheme. I was able to identify only minor variances. For example, the volunteer coder initially included interaction with siblings when looking for opportunities to learn about social interaction ("Libraries - Social Interaction" code) but the decision finally was to exclude interactions with siblings as the analysis focused on opportunities to learn about interacting with others outside of one's immediate family. To clarify the ambiguities we had identified in the initial coding, I made minor modifications to the code manual. In all cases this meant that I added an additional appropriate example to each of the relevant code definitions. We then independently recoded the four cases. The final inter-coder reliability rates for incidents of learning opportunities were 95.3% for the library visit transcripts and 96.7% for the mothers' diaries. The inter-coder reliability rate for the coding of who the child was with during an incident of learning opportunity was 90.3% for the visit transcripts and 90.0% for the mothers' diaries. The overall inter-coder reliability rate for all coding decisions related to the learning opportunities analysis across all data sources was 95.4%.

As noted in section 3.6.3, the quality of the mothers' diaries varied considerably. The richest diaries for this analysis proved to be those which provided the most detail and which were completed by mothers who had other relevant

²³ No incidents of learning opportunities were found in the follow-up interview transcripts for the four cases randomly chosen for this analysis.

experience in observation and writing. While the variability in length and detail in the diaries probably resulted in under reporting by mothers who provided fewer details, there is no reason to believe that the range was unrepresentative of the children as a whole.

Part way through the data collection, I began to ask the mothers directly if and how they felt the public library contributed to their daughters' learning. I had hesitated to do this at the beginning of the study out of concern that it might be a leading question. Making the question the last in the interview, which itself was at the end of the data collection process, meant that this question did not bias further data collection. The eighteen mothers who were asked indicated that they felt the library did contribute to their daughter's learning. Furthermore, the explanations they gave about how this happened are consistent with the behaviours captured in the other parts of the ethnographic records.

6.4 Library-related learning opportunities - A general overview

My analysis of the visit transcripts, mothers' diaries and follow-up interview transcripts indicates that the public library provides the following learning opportunities for preschool girls:

Learning opportunities arising from services other than the provision of library materials

- Learning about libraries and how they work
- Learning through play with library toys
- Learning about interacting socially with others
- Other - e.g., Learning about how children are disciplined in other families

Learning opportunities arising from the use of library materials, particularly stories

- Learning about children's literature
- Learning how stories work (structure)
- Learning from the content of library materials
- Learning to read
- Other - e.g., Learning how to speak more clearly

Fuller definitions are included in the Learning Opportunities Code Manual (Appendix IX.4).

Data are summarized for all thirty girls in Table XII which covers learning opportunities which occurred during the library visits, and Table XIII which includes library-related learning opportunities which were reported as occurring in the week following the library visits. In both tables the total number of incidents of each type of learning opportunity across the entire study sample ($n=30$) is presented in column one. The second column expresses the number of incidents for each type of learning opportunity as a percentage of the total number of all incidents of all types of learning opportunities included within the table. The average number of incidents of each type of learning opportunity per case is reported in the third column. The fourth column indicates the number of individual cases in which at least one incident of a learning opportunity type took place. This is expressed as a percentage of the total number of cases ($n=30$) in the last column. For example, nine girls (30.0% of all cases) had an opportunity to learn about social interaction in their library visit participating in a total of seventeen incidents of opportunities to learn about social interaction (representing 3.9% of all 439 learning opportunities during library visits) or an average of 0.6 opportunities to learn about social interaction per case.

TABLE XII
LEARNING OPPORTUNITIES DURING LIBRARY VISITS

Learning Opportunities	Incidents			Mean No. Per case (n=30)	Cases	
	No.	%	%		No.	%
Services	112	25.5		3.7	28	93.3
Libraries	49	11.2		1.6	18	60.0
Toys	17	3.9		0.6	9	30.0
Social Interaction	12	2.7		0.4	6	20.0
(Total)	(190)	(43.3)		(6.3)		
Stories	75	17.1		2.5	25	83.3
Children's Literature	46	10.5		1.5	16	53.3
Structure	98	22.3		3.3	20	66.7
Content	28	6.4		0.9	11	36.7
Reading	2	0.4		0.1	1	3.3
Other						
(Total)	(249)	(56.7)		(8.3)		
Total	439	100.0		14.6		

TABLE XIII
LIBRARY-RELATED LEARNING OPPORTUNITIES REPORTED
IN THE WEEK FOLLOWING LIBRARY VISITS

Learning Opportunities	Incidents			Mean No. Per Case (n=30)	Cases	
	No.	%	No.		%	
Services						
Libraries	20	11.4		0.7	12	40.0
Toys	0	0.0		0.0	0	0.0
Social interaction	0	0.0		0.0	0	0.0
Other	4	2.3		0.1	3	10.0
(Total)	(24)	(13.6)		(0.8)		
Stories						
Children's literature	23	13.1		7.7	7	23.3
Structure	25	14.2		8.3	15	50.0
Content	76	43.2		2.5	19	63.3
Reading	27	15.3		0.9	12	40.0
Other	1	0.6		0.0	1	0.3
(Total)	(152)	(86.4)		(5.1)		
Total	176	100.0		(5.9)		

Data are summarized in Tables XIV - A1 to XIV - B2 for subjects from each site. Table XIV - A1 reports the number of incidents of each type of learning opportunity during library visits for each site in the first column under each site heading. This is expressed as a percentage of the total number of incidents of all types of learning opportunities during library visits for subjects from that site in the second column of the site heading. Table XIV - B1 is structured the same way but covers incidents of library-related learning opportunities which occurred in the week following the library visit. The first column of Table XIV - A2 reports the number of cases per site in which at least one incident of a learning opportunity type happened. This is expressed as percentage of the total number of cases for each site in the second column under each site heading. Table XIV - B2 is structured the same way but refers to library-related learning opportunities which took place in the week following the library visit. For example, twenty-two incidents of opportunities to learn from the content of stories were recorded in the diaries or follow-up interviews of subjects from Site C. This represents 57.9% of all thirty-eight library-related learning opportunities which were reported as having occurred outside of the library visits associated with site C subjects. However, only five of all eight children at Site C, were reported as having experienced a library-related opportunity to learn from the content of stories in the week following their library visit. These five children account for all twenty-two Site C incidents of opportunities to learn from the content of library materials in the week following the visits.

TABLE XIV - A1
 LEARNING OPPORTUNITIES DURING LIBRARY VISITS
 NUMBER OF INCIDENTS BY SITE

Learning Opportunities	Incidents											
	Site C		Site E		Site J		Site S		Total			
	No.	%	No.	%	No.	%	No.	%	No.	%		
Services	19	22.4	40	36.7	28	20.4	25	23.1	112	25.5		
Libraries	14	16.5	18	16.5	7	5.1	10	9.3	49	11.2		
Toys	7	8.3	7	6.4	2	1.5	1	0.9	17	3.9		
Soc. int. ²⁴	3	3.5	0	0.0	6	4.4	3	2.8	12	2.7		
Stories	16	18.8	18	16.5	21	15.3	20	18.5	75	17.1		
Ch. Literature	7	8.2	8	7.4	18	13.1	13	12.0	46	10.5		
Structure	16	18.8	16	14.7	47	34.3	19	17.6	98	22.3		
Content	3	3.5	2	1.8	8	5.9	15	13.9	28	6.4		
Reading	0	0.0	0	0.0	0	0.0	2	1.9	2	0.4		
Other												
Total	85	100.0	109	100.0	137	100.0	108	100.0	439	100.0		

²⁴ In Tables XIV - A1 through XIV - B2 Social interaction is abbreviated as soc. int. and Children's literature is abbreviated as Ch. literature.

TABLE XIV - A2
LIBRARY-RELATED LEARNING OPPORTUNITIES REPORTED IN THE WEEK FOLLOWING LIBRARY
VISITS NUMBER OF INCIDENTS BY SITE

Learning Opportunities	Incidents											
	Site C		Site E		Site J		Site S		Total			
	No.	%	No.	%	No.	%	No.	%	No.	%		
Services	6	15.8	3	10.7	8	11.6	3	7.3	20	11.3		
Libraries	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
Toys	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
Soc. int.	0	0.0	1	3.6	1	1.4	2	4.9	4	2.3		
Other												
Stories	3	7.9	0	0.0	9	13.1	11	26.8	23	13.1		
Ch. Literature	2	5.3	5	17.9	15	21.7	3	7.3	25	14.2		
Structure	22	57.9	13	46.4	27	39.1	14	34.2	76	43.2		
Content	5	13.1	6	21.4	9	13.1	7	17.1	27	15.3		
Reading	0	0.0	0	0.0	0	0.0	1	2.4	1	0.6		
Other												
Total	38	100.0	28	100.0	69	100.0	41	100.0	176	100.0		

Although the number of subjects per site was too small for a statistical analysis of the differences between sites, a general review of the data suggested only one startling difference. Forty-seven incidents of opportunities to learn from the content of stories were observed in library visit transcripts of Site J subjects, almost three times as many incidents as for other sites. I examined the data more closely and noticed that one subject, Laura (J1), accounts for thirty-four of these incidents. Laura attended a story time during her library visit. The librarian doing the story time asked questions about or asked the children to repeat portions of the material, both print and oral, that she used. Laura responded accurately and I coded this as an indication of an opportunity to learn the content of the material presented. Lisa (C7) also attended a story time. However, Lisa's librarian did not ask as many questions or ask for as much recitation of material so there was not as much overt evidence that a learning opportunity had occurred. Laura's librarian's story time style, used as a technique to encourage participation by the children in the program, seemed to make the learning opportunities more clearly evident. Just as the two librarians differed in their interaction styles with the children at story time, mothers also varied according to how and how much they interacted with their children during the library visits. This is interesting as it suggests that what I and the mothers were able to observe through naturally occurring (as opposed to elicited) behaviour, may underestimate the impact of public library services in providing learning opportunities as some types of interaction style do not elicit overt evidence of this.

Detailed information about learning opportunities for each subject is included

in Appendix X. There was a lot of variation between individual children both during library visits and in the week following library visits. There are obvious explanations for some of these differences. For example, Raya (C1), Danielle (E4) and Alexis (E5) did not use library materials during their library visits so it is not surprising that no incidents of learning opportunities arising from stories were identified in their visit transcripts. Laura (J1), who had the highest number of opportunities to learn during her library visit (sixty-one), was also the child whose visit was the longest (118 minutes) and the one who attended the story time discussed above. The diaries of the mothers of five children (Fatima - J5, Hannah - S7, Sarah - J2, Laura - J1, and Catherine - C4) with the highest number of opportunities for learning reported in the week following the library visits, were among the longest and most detailed.

Some of the variance between children can also be explained by the differing nature of the context in which the learning opportunities occurred, in particular in terms of who was with the child when a learning opportunity arose.

6.5 The context of learning opportunities

6.5.1 The zone of proximal development

Tables XV and XVI indicate who was with the children when learning opportunities occurred during the library visits and in the week following library visits. The figures in the first three columns indicate the number of incidents in which the children were alone, with their mothers, or with someone other than their mothers when a learning opportunity happened. A "Missing Value" code was assigned to

incidents where I was unable to discern who was with the child from the information in the ethnographic record. The bottom rows in both charts report the total number of incidents coded under each heading as well as the percentage of all coding decisions represented in the table. For example, forty children experienced learning opportunities while using toys in the library with their mothers. Overall, thirty-three incidents of learning opportunities occurred in the week following library visits while the children were with someone other than just their mothers. This represents 18.5% of all coding decisions made about who was with the child when learning opportunities arose outside the library.

TABLE XV

**NUMBER OF INCIDENTS²⁵ OF LEARNING OPPORTUNITIES DURING
LIBRARY VISITS ACCORDING TO WHO WAS WITH THE CHILD**

Learning Opportunities	Who the child was with at the time of the learning opportunity			
	Alone	Mother	Other	Missing Value
Services				
Libraries	8	95	28	1
Toys	6	40	8	0
Social Interaction	1	12	10	0
Other	4	3	5	0
Stories				
Children's Literature	6	61	11	1
Structure	11	33	14	0
Content	2	61	49	0
Reading	8	23	0	0
Other	0	2	0	0
Total				
Number	46	330	125	2
Percentage	9.1	65.6	24.9	0.4

²⁵ Some incidents, for example those when a child was with her mother and a sibling, received two codes. Therefore the total number of incidents reported here, 503, is more than the 439 incidents of learning opportunities during library visits reported in Table XII.

TABLE XVI

**NUMBER OF INCIDENTS²⁶ OF LEARNING OPPORTUNITIES REPORTED
DURING THE WEEK FOLLOWING LIBRARY VISITS ACCORDING
TO WHO WAS WITH THE CHILD**

Learning Opportunities	Who the child was with at the time of the learning opportunity			
	Alone	Mother	Other	Missing Value
Services				
Libraries	6	10	1	3
Toys	0	0	0	0
Social Interaction	0	0	0	0
Other	2	0	2	0
Stories				
Children's Literature	5	12	7	0
Structure	8	10	7	0
Content	8	57	11	1
Reading	14	8	5	0
Other	0	1	0	0
Total				
Number	43	98	33	4
Percentage	24.2	55.1	18.5	2.2

²⁶ Some incidents, for example when a child was with both her mother and her father, received two codes. Therefore, the total number of incidents reported here, 178, is more than the 176 incidents of learning opportunities during the week following library visits reported in Table XIII.

Evidence of learning opportunities identified at times when the children were alone tended to reflect learning that had probably occurred previously and was spontaneously appearing in the children's behaviour as observed by either myself or the mothers. Learning opportunities which took place with someone other than only the mother often meant that a sibling was present as well.

Some learning opportunities occurred in the context of story times with a library staff member being the "other" person. Lisa (C7) seemed to learn new songs and poems at her story time. In the following excerpt from the visit transcript Staff2 introduces a new action poem to the children.

Staff2: Now for our second finger play. [Demonstrating all the actions]. What I want you to say, it goes "Hello everybody. How are you today? Thanks for coming to story time to laugh and sing and play. Let your hands go loudly [Staff2 claps hands. The children, including C7, join in clapping and saying the words] clap, clap, clap. Let your fingers briskly [Staff2 snaps her fingers] snap, snap, snap." [C7 did all the actions and smiled throughout.]

In her diary, Lisa's mother reported that one night at supper Lisa told her father about the new "Hello" poem. The supper-time conversation and Lisa's participation in some of the words and all of the actions indicated that she had learned some of the poem. Note that Staff2 used instruction and demonstration to teach the poem. These strategies are practical ones for a group setting. However, the most compelling examples of learning opportunities that I observed tended to occur in one-on-one interactions between the girls and their mothers. The majority of learning opportunities both at the library (65.6%) and at home (55.1%) took place when the children were with their mothers.

Kim's (S2) library visit was very short (twelve minutes, the shortest of all visits) and devoted basically to materials selection. Nonetheless, I observed eleven learning opportunities during Kim's visit. Soon after entering the library, Kim asked her mother where she should go to select her books.

Kim: Mommy. Which bookshelf?

Mother: I don't know. You look. What do you usually look for first?

Observation Note: [Kim goes around the edge to the back side of the picture book shelf unit, kneels on the carpeted floor and begins to look through the books on the "R" shelf.]

Kim: *Curious George* Mommy.

Mother: *Curious George*?

Kim: Ya. I love *Curious George*.

Mother: Ya. I know you like *Curious George*.

Kim's mother then went over to the videos, browsed through them for a moment and returned to her daughter who was still kneeling on the floor near the picture book shelf unit.

Mother: [Referring to the *Curious George* book] What's that one about?

Kim: Dis.

Mother: What's that one about?

Kim: [Pointing to the illustration of Curious George on the cover] This.

Mother: I know. What is it? What do you think it is?

Kim: Curious George.

Mother: And what?

Kim: [Referring to the illustration of the man in the yellow hat, another stock character in the *Curious George* stories] And the man.

Mother: And the man?

Kim: They're both riding their bikes.

Mother: That's right. That's what it says. [Reading the title] *Curious George Rides a Bike*.

Kim chose another book. She then got up and went over to her older brother Jonathan (five years) who was picking books at a different shelf unit in the children's area. She showed him the two books she had chosen.

Kim: Jonathan. [Showing Jonathan the second book she selected] Do you like this one?

Jonathan: Ya!

Kim: I'm gonna pick it. [Showing Jonathan *Curious George Rides a Bike*] And do you like this one?

Jonathan: Ya.

Kim: ["Reading"] *Curious...Curious George Rides His [a] Bike*. I readed it!

Kim's discussion of *Curious George Rides a Bike* with her mother led to her successful "reading" of the title a few minutes later. Note that Kim's mother used a number of strategies to help her daughter decipher the title. In the first excerpt we can see that Kim was very interested in this book. Her mother acknowledged and reinforced this interest ("I know you like *Curious George*"). In the second excerpt we see how the mother used the opportunity of Kim's high interest as an opening to further discussion. She drew Kim's attention to the title by asking her a question about the book ("What's that one about?"). She did not immediately identify the title but asked a series of questions that directed her daughter's attention to key concepts illustrated on the cover: the characters (Curious George and the man in the yellow hat) and what they were doing (riding a bike). She then read the title to Kim, clearly linking the title to Kim's accurate description of the action ("That's right. That's what it says.."). Kim's mother provided room for Kim to explore this task, reinforced the competence Kim brought to it, and provided more information as needed. A few minutes later Kim could confidently state "I readed it."

I identified many examples like this, particularly in the library visit transcripts which captured verbatim conversations between mothers and their children. Elissa (C2) and her mother read *Funny Bones* while in the library. This story is about some

skeleton dogs who go on an adventure one night. In the excerpt below, the skeleton dogs are passing through a zoo which is filled with skeleton animals. Elissa and her mother are identifying the animals they see in the illustrations.

Elissa: And look...the..all the animals in the zoo ha...ha...all doesn't have any skin.

Mother: No. [Pointing to an illustration] What kind of animal do you think that would be from?

Elissa: Hah...a zoo..and, a, it's a giraffe.

Mother: That's right. [Points to another picture]

Elissa: A snake.

Mother: Yes. [Points to another picture]

Elissa: And a...

Mother: It says oink.

Elissa: Oink.

Mother: What would that be?

Elissa: Um...a, a pig.

Mother: Right. [Pointing to another picture] And what would that be?

Elissa: Fish.

Mother: A fish skeleton. [Pointing to another picture] Squeak. Squeak.

Elissa: A mouse.

Mother: Right. [Pointing to another picture] Snort. I don't know what that one would be. A monkey or something.

Elissa: Ya, maybe.

Mother: [Pointing to another picture] What would that be?

Elissa: A elephant.

Mother: Um hmm. [Pointing to another picture] And...?

Elissa: A bull.

Mother: Right. [Points to another picture.]

Elissa: A alligator.

Mother: That's right. You can recognize the animals just by their bones. The way they're put together.

Elissa's mother used strategies similar to Kim's mother to create a positive learning situation in which Elissa is challenged but never ends up being unsuccessful. She asked questions to elicit participation, she left lots of room for Elissa to reply, she directed Elissa's attention to important clues (the illustrations) and provided additional clues (animal sounds) when Elissa stumbled, and she reinforced correct responses.

She was not afraid to admit that she did not know what one of the animals was, clearly indicating to Elissa that it is fine not to know something. She also provided a general overall summary of the task they had done together.

Both of these incidents of learning opportunities took place in a context which is consistent with Vygotsky's concept of the zone of proximal development (Vygotsky 1978; Rogoff and Gardner 1984; Rogoff 1986). The learning was interactive. Both adults guided their daughters' participation so that the children could function comfortably. Both mothers provided bridges to help the child move from what they knew to what they needed to know. Both adults structured the task to enable and organize the problem solving. Both adults also gradually moved more of the responsibility for managing the problem solving to the child. The concept of the zone of proximal development proved to be a useful construct to focus observation and analyze data in this study.

Not all of the mothers were able to work well within the zone of proximal development. Lesley's (J4) mother was very committed to helping her children, Lesley and her two older siblings, to learn and do well in school and in life. She told me this several times. I observed her using learning materials with the children during both the screening and follow-up interviews. The children's ready and competent participation in these activities indicated to me that they were routine for this family. The following incident occurred during Lesley's library visit. Lesley's mother was reading *I Can Read Difficult Words*. She would point to an illustration on the page and ask Lesley to identify the item. Lesley was attending to her mother but also

playing with the toys provided in the children's area.

Mother: I want you to tell me what these are.

Lesley: [Correctly identifying item on the page] Scissors. [Mother points to the next picture. Lesley pauses] Um...

Mother: Mushroom. [The picture was actually labelled "toadstool"]

Lesley: Mushroom.

Mother: [Pointing to the same picture] What's this?

Lesley: Mushroom. [Mother points to next picture] Umbrella.

Mother: [Pointing to next picture] What's this?

Lesley: Train [Labelled "engine" in the book]. [Mother points to next picture] Van [Labelled "truck" in the book]. [Mother points to the next picture] Dish.

Mother: No. That's a whistle.

Lesley: Whistle. Whistle.

Mother: What's this?

Lesley: Um...

Mother: [Voice louder and impatient] Lesley. What's this?

Lesley: Turtle [Labelled "tortoise" in the book].

Mother: [Pointing to a picture labelled "choir" in the book] Do you know what these people represent?

Lesley: Mom. It's...

Mother: Do you know what these are, Lesley?

Lesley: Mommy!

Mother: What are these? You don't know what these are.

Lesley: [Referring to illustration on the next page] Penguins [correct].

Mommy. [Referring to the school bus toy she is playing with]

This..this..this won't go.

Lesley's interaction with her mother is quite different from Kim's and Elissa's with their mothers. Whereas Kim and Elissa's mothers were guided by their children's interests, Lesley's mother took the initiative in selecting the book and Lesley herself obediently accommodated her mother's wishes ("I want you to tell me what these are"). This episode appears very much like a drill. Lesley's mother gave her no clues that might have helped her make connections between what she knew and what she did not know. She simply provided the answer (often differing from the actual text) and asked Lesley to repeat it suggesting that she sees repetition and rote learning as

the route to successful completion of tasks. Rather than providing positive feedback when Lesley was successful, she emphasized Lesley's failure ("You don't know what these are"). Lesley, desperate to please her mother, moved on to "penguins," something she knew, from "choir," a concept which was obviously difficult for her to recognize from the illustration provided in this book. In fact, *I Can Read Difficult Words* is meant for children who are six or seven years old. It was not surprising that Lesley had difficulty with this work. It was unfortunate that her mother was unable to gauge appropriately the level of the material. Within a few moments Lesley actually moved away from her mother, choosing not to continue sharing this book with her.

Techniques for working well within the zone of proximal development can be learned. Anna's (S3) mother was helping Anna and her younger sister Stephanie to put together puzzles. She was using many of the strategies employed by Kim and Elissa's mothers to help her children with this task. An unrelated older woman and a toddler, who I presumed to be her grandson, were also working on puzzles at the same time. Anna's mother provided a series of helpful hints and positive acknowledgements of success to her girls. The grandmother began to emulate Anna's mother's behaviour, incorporating the same phrases into her talk with her grandson a minute or two after hearing them spoken. Anna's mother unknowingly had been modelling good interactive learning behaviour for this grandmother who was nearby.

Overall, mothers appeared to have a great many skills that allowed them to interact very effectively with their children. Libraries are allies because they support the developmental learning that parents are so good at. Libraries should try to help

mothers like Lesley's as well as fathers and other adult caretakers, learn how to interact effectively with their children in the zone of proximal development. Staff can be trained to model appropriate behaviour. Opportunities and space should be provided for families to interact at the library and so learn from one another. Workshops could be given to teach parents these skills, focusing especially on how to use them while sharing library materials with children.

6.5.2 Sense making

Sense making did not provide a very satisfactory framework for analysis of the data. It was relatively easy to identify incidents where the child asked for help in making sense of something. For example, children would sometimes ask questions which implied they had a gap in their understanding of something. Rebecca (S4) and her mother were reading the book *Curious George Goes to the Hospital*. In this story George swallows a piece of a puzzle. At the hospital the doctor tells him that he has something stuck in his stomach. Rebecca interrupted the reading to ask a question.

Rebecca: How did it get stuck?

Mother: He put something in his mouth that he shouldn't have put in there.

Seemingly satisfied with this answer, Rebecca allowed the reading to go on. It seems clear that Rebecca had a gap ("How did it get stuck?"). She also received an answer from her mother that helped her bridge the gap. However, because this exchange is simple and short, it is difficult to apply another of the important components of the sense making approach, which is to attempt to understand how something helps an individual bridge a gap. This is frequently done by asking individuals, through

interviews or written questionnaires, how something helped them. As indicated in Chapter Three, survey and interview methods are inappropriate to use with young children. While sometimes I was able to identify gaps and bridges, I was unable to explain how the bridges helped. As well, the children asked surprisingly few questions during their library visits and, from the mothers' reports, during the week following visits. More often, the mothers tended to anticipate children's questions. For example, a mother might ask if a child understood a particular word in a story and then explain it if necessary.

6.6 Concluding remarks

All of the children experienced opportunities to learn as a result of their use of the library and its collections. One of the most important contexts in which this learning took place was in the company of the children's mothers who often facilitated or scaffolded the learning opportunities for their children. As evident in this excerpt from the follow-up interview, mothers, like Lisa's (C7), recognize and value the role of the library in their children's learning.

Researcher: Do you think the library contributes to Lisa's learning?

Mother: Oh yes.

Researcher: How?

Mother: Oh, because it's a learning experience when she goes there. She gets to see all the different things at the library. The different displays. The books. Just learning new things during the story time. Sometimes, sometimes when she feels like it she plays with the other kids and stuff like that. And I like that. And of course the books themselves. We.. .you know it's like a never ending source of new books. And so we go and get the books for the week.

Chapters Seven and Eight describe in more detail how library services and collections support learning by young children.

CHAPTER SEVEN - LEARNING OPPORTUNITIES ARISING FROM LIBRARY SERVICES OTHER THAN COLLECTIONS

7.1 Introduction

Library services other than the provision of materials gave rise to 43.3% of the learning opportunities that occurred during library visits and 13.6% of learning opportunities happening outside the library, accounting for 214 (30.1%) of all 615 learning opportunities identified in this study.

7.2 Learning about libraries and how they work

It is the day after her visit to the library. Sarah (J2) is playing in the living room of her family's home. Her mother's diary reports:

...she did [a] role play as a librarian again, checking out books, setting up lego blocks on [the] coffee table, and scraps of paper as library cards.

This and the other incidents of playing library described in Chapter Five (section 5.3.3.3) reveal both the children's knowledge of and keen interest in libraries.

Although only three of the children actually played library, I identified a total of 132 varied incidents of opportunities to learn about libraries involving twenty-nine (96.7%) of the girls. This indicates that one of the major things young children learn through their use of libraries is what libraries are and how they work. Evidence in my data suggests that the girls were interested in routine operations like returning and checking out library materials. They also grappled with larger, more abstract ideas like the concepts of the library as an organized collection of materials, the library as a

shared resource, and the library as a publicly accessible community facility and landmark.

7.2.1 "Could I do that?" (Whitney, E1) - Learning about routine library operations

As indicated in Chapter Four, the children participated in or were present during many routine library operations. Mothers, and occasionally staff or others, sometimes used these opportunities to instruct the child about how to help with a task. In the following excerpt Genevieve (E8) and her mother are preparing their books for check-out:

Mother: These are your books. Can you open them up to the back again then?

Genevieve: But I don't like it.

Mother: Oh. They're not too tight. Open them up to the back please.

Genevieve: [E8 begins to open up her books to the back and stack them in a pile on the table ready for check out.] Mom, can we take this one?

Mother: Yes we can take that one. That's the *Carl* book. OK? OK.

Now I'll open up my books to the back. [Brief lull in the conversation.

The sound of books being opened can be heard on the tape.] OK. I'll get the card out. [Mother unzips her purse and pulls out her library card.]

Genevieve: There. Opened up.

Mother: Will you take the card? [Mother hands the library card to E8.

Mother picks up the library books.] OK. Ready to go? OK. Let's go over and take your books out. [E8 and Mother walk over to the circulation desk.]

Genevieve: The books out?

Mother: Take your books out.

Genevieve: Why the books out?

Mother: Well that's what you're supposed to do. Now wait here with me because you've got the card. You have the card.

Genevieve: [Whispering to herself] I've got the card. I'm coming here.

Genevieve's mother used several strategies to help her learn how to check out library materials. She provided clear verbal directions and sometimes she explained actions. She broke the task up into several smaller steps, modelling the task by also doing it.

She encouraged and expected Genevieve to participate actively. She gave her an important job, holding the library card, to keep her involved and interested.

Genevieve's mother wanted her to learn how to check out library materials and Genevieve's active and successful cooperation suggests that she was willing and able to learn.

The mothers frequently provided instructions about how many items could be borrowed. This was a different sort of routine library operation in that it was defined by the family rather than the library. Except for video-cassettes and high demand items like holiday books, the library where this study was conducted imposed no limits on the number of materials that could be borrowed. Directives such as "You can have two [or however many] books" (Mother of Kim, S2) were common. Occasionally mothers asked their children if they knew how many books they could have and some of the children knew exactly what their limit was and were able to respond correctly.

I also observed others, again especially mothers, providing explanations of procedures and tasks to the children. Whitney (E1) was quite eager to help the library staff member at the circulation desk mark out her materials. The "black thing" she refers to in the following excerpt from her visit transcript is the wand used by staff to scan bar codes on patron cards and library materials.

Whitney: Could I help you do that thing?

Mother: No, that's her job.

Whitney: Help you with that black thing?

Staff1: Oh, I just...

Whitney: Ya, that.

Staff1: I use, I use this on the card.

Whitney: Could I do that?

Mother: No. The lady...

Staff1: I'll need to do that. So I can put it into the computer so the computer knows that you have these books and videos.

Explanations like these appeared spontaneously especially in situations when other avenues to understanding, such as encouraging the child to actively take part, seemed inappropriate.

Sometimes the children sought information about routine library operations by asking questions. Lisa (C7) attended a story time during her library visit. Her mother took her into the room where the program was to take place and settled her in on the floor. At Lisa's age and in this particular program in this particular library, parents would not normally stay with their children during the story time. Just as her mother was leaving, Lisa asked a question.

Lisa: But then will the, why do the parents have to stay out of this room? Why?

Mother: Because there's a lot of kids. And it's for the older kids. So there's gonna be the librarian and the helper.

In the follow-up interview Lisa's mother told me that, although it had been over a year and Lisa had attended several sessions of story time on her own in between, she and Lisa had gone to toddler's story times together in the past. She felt Lisa was remembering this and trying to figure out why this story time was different. The mother's response was quite accurate. Older preschoolers are able to attend independently, fewer adults are needed to provide safe supervision and more children can be accommodated if adults are excluded. In this example we see a child actively seeking information about how a routine library activity works, in this case the

preschool story time.

I identified opportunities for children to learn about routine library operations other than check out and story time. These opportunities included the return of library materials, loan periods, overdue fines, exhibits and displays, catalogue searches and shelf checks for specific items. There were some routine operations that the girls experienced for which there was no overt evidence that would indicate that the children had had opportunities to learn how these services worked. These included reference and readers' advisory services. While the girls were present when these services were provided, I observed no mothers providing instructions or explanations to their daughters about these reference and readers' advisory services and no children asking questions about them. Nevertheless, overall there were many opportunities for the children to learn about how the library worked. Some, like the staff explanation of the bar code reader, seemed to arise spontaneously. Others, like Genevieve's mother's lesson on checking out library materials appeared to be intentional. Fatima's (J5) mother provided an explanation for this in the follow-up interview: "I like to empower them."

7.2.2 "There's the Bs." (Katie, J7) - Learning about the concept of the library as an organized collection of materials

One of the key distinguishing features of a library is that the materials are organized for easy retrieval. School librarians spend a lot of time doing bibliographic instruction to teach children about the organization and retrieval of information. As reflected in texts on school librarianship (Haycock 1990; Seaver 1984), this

instruction is carefully synchronized with cognitive development. Typically it begins with teaching the difference between fiction and nonfiction in kindergarten and grade one and moves on to the alphabetic organization of fiction and broad numbered classes of nonfiction in grades two and three. The children in my study, especially while they were engaged in the selection of library materials to borrow (see section 4.3.3), frequently gave indications that they had a beginning and developing understanding of the library as an organized collection of materials.

Almost all the girls knew where to find the children's materials, including children's videos which were physically separated from the other print and nonprint resources for children in all locations except Site C. They also knew where the picture book area was within the children's section. I know this because many of them went directly to the correct area of the library, running ahead of their mothers.

In the incident quoted above in section 6.5.1, pages 159-60, Kim (S2) successfully retrieved a *Curious George* book. Interestingly all three of the successful independent shelf retrievals that I observed involved *Curious George* books. Not only is George a beloved, classic character in children's literature, but the books about him have distinctive bright yellow covers that make them easy to spot on library shelves. The children's success arose from their ability to recognize specific books and their understanding that books are shelved in particular places in libraries. A few of the children were aware of call numbers. Rebecca (S4) and her mother had jointly done an OPAC (on-line public access catalogue) search to see if the library had any books about elephants. Rebecca chose one title she wanted to look at and slowly and

carefully wrote down the call number on a slip of paper. Rebecca then went to the table in the children's area and began to build a puzzle while her mother retrieved the book from the nonfiction shelves.

Mother: [Approaching Rebecca at the table]. Look I found that book.
Do you want to look at it with me?

Rebecca: Elephant book? Is it the same number?

Mother: Ya. Look.

Observation Note: [Rebecca and her mother compare the number on the spine label of the book to the call number Rebecca had written on the paper at the OPAC.]

Mother: [Alternately pointing to symbol on the book and then on the paper] J...5...9...9...R...A...O. Let's have a look at it.

Mothers modelled the search for books by call number. They described out loud what they were doing as they did it. They ran their fingers along the spine stickers on the books and stopped and pointed to the label on the book when it matched their search. Katie's (J7) mother, when asked about an incident where she had done this with Katie, told me that she did this on purpose.

Researcher: After Katie said she wanted *Clifford* books [popular stories about a large red dog by Norman Bridwell] you told her that they were with the Bs. You went to the shelf together to find them. Would you usually do that?

Mother: Yup. Ya, we go to the..she's just starting to notice the letters so probably eventually she'll be able to go to the Bs by herself.

Researcher: OK. So you were doing that..

Mother: Yup.

Researcher: ..to try to..

Mother: So she knows where things are.

The children varied a lot in terms of their interest in and ability to locate items correctly within the collection. I observed failures as well as the successes described above. For example, several of the children, when asked to put something back in the right place, including items that they had pulled from the shelves themselves, were

unable to do this correctly and misshelved the material. Nonetheless the data suggest that, through their use of the collection, an initial understanding of it as an organized entity was beginning to emerge in some of the girls. At the very least, most knew that the children's material was a distinct subset of the entire collection. Some of them knew that particular items were housed in particular locations. Others were beginning to understand that call numbers are related in some way to that shelf location.

This early understanding has not been acknowledged in the literature. It is significant because a key to developing information literacy skills is the recognition that information can be organized and retrieved. Libraries could do more to support preschoolers in this learning. For example, if we suspect that early retrieval of items is connected to recognition of specific materials and recall of their particular shelf location, popular titles could be displayed cover out in their correct shelf location. If preschool children are able to recognize letters and connect them with the call numbers on the backs of books, picture book shelves could be labelled with appropriate letters. Librarians could consistently and overtly model shelf retrieval behaviour.

7.2.3 "I want to buy *Thomas the Tank*" (Whitney, E1) - Learning about the concept of the library as a shared resource

Public library staff laugh over anecdotes about young children talking about "buying" or "paying for" their library books. My library visit transcripts include five incidents where four children (Whitney - E1, Emily - E7, Kaitlyn - J6 and Katie - J7) actually used terms like these in reference to borrowing activities. In this study, the

children's emerging understanding of the concept of the library as a shared resource was evident in incidents dealing with borrowing resources, caring for resources, sharing resources with others, and using and caring for a shared space.

I observed the children exploring a number of aspects of the concept of borrowing. Many participated in, or observed, the check-out process (86.7%) and, although they may not have clearly understood what was going on, they did all take some materials home with them.

When something is borrowed it needs to be returned. Fatima's (J5) mother recorded the following incident in her diary on the day after their library visit.

11:00 a.m. Mom initiated discussion re books and videos to be returned today.

Fatima: I don't want to return any videos.

Mother: Are we done with the *Babar* books?

Fatima: Yes.

David [Sibling, two and one half years]: No.

Fatima agreed to return some books that she wouldn't return yesterday.

[Mother noted the three book titles.]

When I asked about this in the follow-up interview, the mother indicated that Fatima knew that library materials had to be returned but she did not like to return them. It was therefore necessary to negotiate with her several times before she would cooperate. This and variants of it, including the need to renew favourite items multiple times, was echoed by other mothers.

It was evident that some of the children understood that others could borrow materials too and that this had implications for their own use of the resources. On the fourth day after their library visit, Elissa (C2) went to another branch library with her mother. They chose some books together. Elissa's mother then noted that:

She played with the plastic animals and dinosaurs and set her books on the table in a pile "guarded" by the animals.

In the follow-up interview Elissa's mother explained that her daughter had done this to prevent other children from taking the books she wanted to borrow. Marissa (S5) insisted on borrowing a book for a new baby sibling that had not yet been born because "Somebody's gonna take it after...And read it to their own baby" (S5, Library visit transcript). Sadako's (C3) mother would not let her borrow a video because they already had several at home so Sadako hid it "very high" up on top of the video racks where "the mommies can't even reach it" (C3, Library visit transcript). A few of the children, when unable to find a specific thing that they wanted, gave indications that they knew someone else may have had it. Whitney (E1), helping her mother to look for a book that her older brother needed for a school project about the earth, said:

Whitney: Where is it? Maybe somebody taked it. Maybe somebody taked Nathan's book.

Many of the children seemed to have a good understanding of how to care properly for library materials. Elissa (C2) and her mother were selecting picture books together. Elissa pulled *I Can Count* by Dick Bruna off the shelf, opened it up and then pointed to some scribbling on a page.

Elissa: Oh no! Write..there.

Mother: That's not good is it? To write in the book.

Elissa: No, no. And write..there.

Mother: We have to take good care of books. We can't write in them.

Elissa: Ya. Ya.

In all, one third of the children independently identified damage to library materials.

Like Elissa, many were shocked and upset by the damage, indicating that they had learned that this was not an acceptable way to treat library books. Most times the mothers, like Elissa's, used this as an opportunity to instruct their daughters about how to care for library materials properly. This concern extended to library equipment and facilities. The mothers intervened to stop their children from climbing on the furniture, spinning display racks, throwing toys, or mistreating physical resources in other ways.

Materials that could be used only in the library, particularly toys but also items from the non-circulating and reference collections, provided opportunities for the children to learn that these things had to be shared with others. Lesley (J4) was quite excited to discover that Site J had acquired some new toys for the children's area since she had last come to the library.

Lesley: Mommy, are these my toys?

Mother: No. They're not your toys. They belong to the library.

Lesley: Mommy. Mommy. Well..well..well..[Referring to the spot on the table in front of her where she has gathered two or three toys]

When they're here they're mine.

Mother: No, they're not.

Lesley: [In a sassy tone of voice] Oh yes.

Mother: You're just using them.

Lesley: No I'm not.

Mother: Uhm hmm.

Lesley: No I'm not.

Elizabeth (E2) spent ten or twelve minutes carefully looking through a children's magazine which could not be borrowed because it was the latest issue. Another child (male, about five years old) was also interested in this magazine and repeatedly approached Elizabeth asking if he could have it.

Other Child: OK, now I'm going to look at this too.
 Elizabeth: No. I'm going to look at it still.
 Other Child: I want to look at it.
 Mother: Elizabeth, I think he's been pretty patient and we're going to go now.
 Elizabeth: [Handing the magazine to him] OK.

The mothers coached their children to share toys, puzzles and other library resources, and the children usually complied, although often with reluctance.

Part of learning how to use a library involves learning how to behave while in the shared space of the library. Children were reminded that they could not eat in the library.

Hannah (S7): Mommy. Apple ring.
 Mother: We can't eat in the library Hannah.
 Hannah: OK.

Ruthie (S6) and her younger sister had been running all through Site S playing chase and hide-and-go-seek when they ran into a staff member.

Staff3: [Sternly] You can not run in here. You can not run in here.
 OK?
 Ruthie: OK.
 Staff3: Thank you.

Mothers, and occasionally staff, were quick to intervene when they saw inappropriate behaviour like that cited in the incidents above. Interestingly only one mother insisted that her child be quiet while in the library, suggesting that acceptable standards for children's behaviour in libraries now allows them to be noisy within reasonable limits.

Mothers tried to encourage the children to help care for the shared library space by tidying up the play areas. Most of the time the children cooperated, although they often protested. Marissa (S5) had been putting puzzles together at the table in the

children's area in Site S when the following conversation took place:

Mother: OK. Let's put the puzzle away and we're going to go.

Marissa: [Referring to the puzzle] But that was out. I didn't take it out.

Mother: Yes but you made it. So let's put it away, OK?

Marissa: Yes, yes. I didn't take these out, I just taked all those out.

Mother: Right.

Marissa: The red..

Mother: OK. Let's put it away.

Observation Note: Marissa puts the puzzle away.

Overall, twenty-two (73.3%) of the children were involved in one or more incidents where they had the opportunity to learn about, or showed that they had some understanding of, borrowing, caring for library materials, sharing library resources with others or using shared library space appropriately. This indicates that children as young as four years old are likely to have an emerging understanding of the library as a shared resource.

7.2.4 "Why is the soap [pink]?" (Catherine, C4) - Learning about the library as a publicly accessible community facility and landmark

Jenna (C5) and her mother were sitting at a table working on a book report for the library's summer reading program. Jenna looked up and saw a group of children and a couple of teachers from a nonlibrary program that she had attended just a few months before.

Jenna: Who's that?

Mother: Oh. Theatre School.

Jenna: [Laughing delightedly] Neat. How come they're here too?

Mother: Well. All kinds of people use the library. [Jenna laughs again]

Do you want to say hello?

Jenna: [Whispering] No.

Except for commercial enterprises like malls and grocery stores, very young children

are likely to have only limited experience with publicly accessible spaces other than neighbourhood parks. Organizations like schools, community centres, churches and medical facilities are encountered either infrequently, or for a very specific purpose, or with a limited and delineated user group. The public library is one of the first noncommercial community facilities that small children use.

Community facilities have public washrooms. For some of the children who used the washroom during their library visit this washroom trip was an exciting and interesting experience. For example, Catherine (C4) had been playing in the library for a long time. She and her mother were about to leave to do some other errands and her mother insisted that she visit the washroom first. Site C has a child size family washroom.

Mother: You gonna wash your hands.

Catherine: Let me do it by myself. [Reaching for the taps] I can stop it..I can reach it because it's down low.

Mother: Do you need a hand?

Catherine: [Pointing to the tap with a blue label on top] That one's hot?

Mother: That one's cold. Blue for cold. Red for hot.

Catherine: Why is it blue for cold and red for hot?..[Pointing to the liquid soap dispenser and changing topic] And soap?

Mother: There's soap. That says PUSH on it. [Catherine begins to push the button on the dispenser.] That's it. OK, that's enough soap.

Catherine: Mama. Why is the soap that colour?

Mother: Uhm..I guess they decided that pink would be a nice colour for soap.

Catherine: Look. Pink bubbles.

Other incidents involved office equipment (e.g., photocopiers, pencil sharpeners), signage and clocks and indicated that public libraries have a peripheral role in helping young children to learn about the physical plant of public facilities.

As noted above in section 7.2.3, the children were also given a lot of

instruction, usually by their mothers, about how to behave in public places. The children's area of a library is a perfect setting for children to practise these skills. It is usually a separate area of the library so there is less likelihood that the children will disturb others. It is also a place where children and their childlike behaviour are expected to be found. Therefore adults who encounter this childlike behaviour in the library are less likely to feel aggrieved than when they encounter it in other public places such as airports or churches that are less suited to children.

Fatima's (J5) mother reported an interesting conversation. It took place in the family car on the third day after the study library visit as she, Fatima and David (younger sibling, two and one half years old) were driving through the downtown area.

Fatima: [Pointing to Site C, the library where mother works] I see Mom's library. Ha ha ha ha ha ha. [Mother's note - she does see it.]

David: I see it too.

Fatima: No you don't.

David: Yes.

Fatima: [Pointing to City Hall] Is that the library Mom?

Mother: No, that's city hall.

Fatima: David, that's not the library.

Other mothers reported library sightings in their diaries. At the end of our follow-up interview Laura's (J1) mother told me:²⁷

Like as soon as we are at [First] and [Cross Streets], she starts to get excited. Or if she even sees the mall, she knows the library is behind there. We have to drive quite a ways. She always pays attention to the

²⁷ Note - This is a paraphrase of J1's mother's talk. It is part of a conversation I had with her after the formal interview was over and I had turned off the tape recorder. I made detailed notes about this conversation in my car as soon as I left J1's house. I believe it accurately, if not exactly, represents what she said.

trip. She knows which way to go. She knows that when she sees the Hydro building we have to turn right. Or that when we see something else that we still have a long way to go. It's like she has a map inside her head. We don't go to too many. It's as if the library is one of the things in the neighbourhood, one of the places that she knows about in her neighbourhood.

Using the public library seems to help some children understand what community facilities are and how they are used by the people who live in the community.

7.3 Learning through play with library toys

Sacha (J3) and her older brother Stephen were playing together when they discovered a bin of waffle blocks, a construction toy with interlocking, flat, square pieces. Sacha picked up two pieces and tried to put them together.

Sacha: Stick in. Stick in.

Stephen: Sacha, see. They go together like this. [Stephen fits two of the blocks together.] You have to fit this part in here. Put one in here.

Sacha: OK. Let me try. [Sacha inserts the edge of a piece into the edge of the piece Stephen is holding.] I got it!

Stephen: [Adding another piece] Now if we put this in here. [Adding another piece] And another one there. [To Sacha] Get that one. Put it on top. [Sacha adds a piece to the top, completing a two story tower-like shape] Now we have a tower.

Sacha: Ya, a tower. [Calling out] Mom, look at.

Although the toys differed between sites, all four locations provided some for young children to play with while in the library. Most of the girls, twenty-six or 86.7% (see section 4.3.5), did play with toys. I identified forty-nine opportunities, involving eighteen (60%) of the children, to learn something while playing. The most obvious type of learning that occurred was related, as with Sacha above, to how to

use a toy, especially a toy that seemed to be new to the child. I saw children learning how to put puzzles together, play checkers, build with blocks or use other toys.

Six of the mothers used the playthings provided in the library to teach their children traditional early academic skills like counting, printing letters, shape recognition, colour recognition and animal identification and sounds. Anna (S3) and her younger sister Stephanie were putting together puzzles when this conversation took place:

Anna: Mommy. I know a lion and a tiger between. [I know the difference between a lion and a tiger.]
 Mother: Can you tell the difference?
 Anna: [Pointing to the lion puzzle piece] Lion..
 Mother: How can you tell? [Anna points to the lion's mane.] Right.
 Anna: [Pointing to the tiger puzzle piece] Tiger.
 Mother: Very good.
 Anna: [Pointing to the stripes on the tiger] Stripes.
 Mother: Right.
 Anna: [Pointing to the mane on the lion] Manes.
 Mother: What does a lion say?
 Stephanie and Anna [concurrently]: Roar. Roar.
 Mother: And what's that Anna?
 Anna: Bear.
 Mother: And what does a bear say?
 Anna: [Whispering] What?
 Mother: [Laughing] Good question.

In this example, as in the examples with Kim (S2) and Elissa (C2) in Chapter Six, the mother used the child's interest to initiate the learning opportunity, asked questions to elicit participation, and reinforced correct responses. No particular type of toy dominated these incidents, although the two opportunities to learn how to print letters happened at the site where writing materials, a blackboard and chalk and crayons and paper, were available.

A few of the incidents of opportunities to learn from toys arose from a child's curiosity about a feature of the toy. Catherine (C4) spent a long time playing with a Brio train set during her library visit. Brio train cars are connected together by magnets that are found on the ends of the cars. Catherine seemed to be familiar with the term magnet. However, she was having some trouble getting the cars to stick together because of the bipolar nature of the magnets. With some help from her mother Catherine learned how the magnets worked and was able to teach another, younger child how to use them.

Mother: [Approaching Catherine who is having trouble trying to connect a train car to the engine] What makes them stay together?..The train cars?

Catherine: Magnets.

Mother: [Pointing to the train car] Try turning that one around.

Catherine: OK.

Mother: And see if that helps.

Catherine: [Reaching to do it] Let me get them.

Mother: OK.

Observation Note: C4 successfully links the two cars together.

A few moments later Michael (male, about twenty-two months old) joined Catherine at the train set. Michael tried but was unable to attach a car to the train engine he was using.

Catherine: [Pointing to the magnet on the end of the car] It doesn't need to go on there. [Pointing to the magnet on the other end of the car] Cause it has to go like that. I think it goes on to the very..it goes on that there.

[Michael's] Father: [To Michael] That little girl's telling you where to put it. You gonna put it on the back of that train there?

Catherine: Ya, it goes on the back of that green train I think.

Father: Michael, you put it on the back of the green train. That little girl...

Catherine: [Pointing to the "wrong" end of the car] This one's got trouble sticking. You see it doesn't stick really..every time you stick to

pull it, it seems to come right off.

Father: You put it on the other end. See, that little girl says to put it on the other end. See, it doesn't stick on that end.

Michael: [Whistling like a train] Whoo..whoo.

Same episode of play, a few minutes later:

Observation Note: Michael's train is in the middle of a tunnel.

Father: That little girl's gonna push your train out for you. [C4 uses the train she is playing with to push Michael's out of the tunnel.] See, there goes your train out the other end.

Catherine: [C4's train is now stuck to the back of Michael's train.] And he got stuck on the magnet and...

Father: Say thank you.

Michael: Tank you.

Father: That's a boy.

Michael: Tuck on magnet.

Father: Stuck on the magnet.

Catherine: He got stuck on the magnet because he didn't..these cars aren't watching where their little train..cars are going.

Although it would be hard to predict what might arouse a child's curiosity, libraries might want to consider purchasing toys that seem likely to pique interest because of a unique or interesting feature.

Thirteen of the children (43.3%) used the toys as props in story making. Chloe (C6) had constructed a huge castle-like structure with hundreds of wooden blocks. She called her mother over and together the two of them looked at her construction.

Chloe: Look at my house.

Mother: That's beautiful.

Chloe: [Pointing to an opening which was probably a window at the top of one of the towers] And that's, that's where they all go to look out.

The bal.. [balcony].

Mother: What do they see when they look out?

Chloe: Ah. Trees, giants and treasures.

Mother: Trees, giants and treasures. Wow.

Chloe: And didors [dinosaurs?], trannosaursuses.

Mother: Tyrannosauruses. Wow. That's quite a view.

Chloe continued the guided tour of her house with her mother. There was a changing tower for babies, special houses for giants, a high dungeon for "bad guys" and a washing tower with a washing machine in it. At the end of the tour Chloe told her mother:

Chloe: Now we are done with this giant house. And we [drawing these words out as she says them] all lived happily, happily ever after..after.

Note that Chloe used elements commonly found in stories (giants, treasures, dungeons) and a conventional ending. While almost any sorts of toys were used for this "storying" behaviour, it was most frequently associated with toys such as house-like constructions the children had made themselves, puppets, doll houses, figurines, a felt board and other items that we associate closely with imaginative play. Public libraries are interested in increasing children's interaction with and exploration of stories and should consider selecting toys for in-library use that promote this type of play.

7.4 Learning about interacting socially with others

During her library visit Alexis played a lot with some wooden blocks. At first she built things with her mother. Then she built a castle with another child (Timmy, male, about three years). The children began to argue and their mothers separated them, giving each half of the blocks. Before long Timmy reached over and took a few of Alexis' blocks.

Alexis: I'm gonna tell my Mom that you're not letting me have any castle. [Calling] Mom!

Timmy: Well make it of your own [blocks].

Alexis: [Calling] Mom. Mom.

Mother: Yes.

Alexis: This little boy is saying that he won't let me have a castle.

Timmy's Mother: Tim.

Mother: Well you can have what you want.

Timmy's Mother: Timmy. You can share, you know. [To Alexis's mother] They each have the same number of bricks.

Mother: Alexis, you want a castle, you make a castle.

Alexis: Well he said he doesn't want me have a castle. [To Timmy] I don't like you any more.

Mother: [Shocked] What are you saying?

Alexis: I don't like him because he's not nice to me.

Mother: Well maybe you should put the blocks away Alexis.

Alexis: No.

Mother: You play with the blocks that you've got and build a castle with the blocks you have.

Observation Note: Quiet for a moment except for the sound of blocks banging.

Alexis: [Coughs twice] [To mother] I'm ready to make my own castle.

Timmy: Who cares? I'm just not going to make a castle.

Neither Alexis nor Timmy seemed to enjoy their interaction with each other. Alexis's mother told me in the follow-up interview that one of the reasons she took Alexis, who had no brothers or sisters at the time of data collection, to the library was to give her a chance to be with other children, to learn how to get along with them. Including this example, thirteen of the seventeen incidents of opportunities to learn about social interaction that I observed during library visits involved squabbles about sharing toys. Sometimes parents were able to resolve the problems and, like the mothers in the incident cited above, provided strategies for dealing with them ("You play with the blocks that you've got") as well as instructions about proper behaviour ("You can share, you know"). Sharing was very difficult for some of the girls. Sometimes they did not want to share. Other times, another child like Timmy did not want to share with them. The library is probably a suitable place for young children to learn how to

avoid and deal with minor, unpleasant social interaction with others. An adult who can intervene and instruct is usually quite close by.

Many of the girls played amicably with other children during their visits. However, I did not observe many incidents where adults intervened to support learning to interact appropriately with others. Three episodes of interaction with infants constitute an exception to this. Madeline (C8) was enthralled with Rose, a three month old girl who was at the library with her mother.

Madeline: Can I pick her up?

Mother: No, hon.

Rose's Mother: We...

Mother: It would be just a bit too much.

Rose's Mother: You could hold her hand.

Mother: Oh look. She's reaching out for your hand.

Observation Note: Madeline holds Rose's hand.

Rose's Mother: There.

Mother: [To Rose] Hi love. Hi.

Madeline: Hi. [Rose squeals and hiccups.]

In this example both mothers showed Madeline how to interact with Rose physically and verbally.

While visiting the library seems to provide some opportunities to learn about how to interact socially with others, in this study such opportunities were not numerous and usually involved conflict.

7.5 Other learning opportunities arising from library services other than the provision of materials

It was quarter to three on a Saturday afternoon. Sacha (J3) had been playing with her older brother Stephen, when the old fashioned pendulum wall clock in the

children's area at Site J began to chime. The children got up, hurried over and stood watching the clock.

Stephen: It's three o'clock. Three o'clock already.

Sacha: It's three o'clock.

Stephen: Well, almost three o'clock.

Sacha: It's almost three o'clock.

I noted a few types of learning opportunities that were too small in number or limited to too few children to merit their own category or in-depth discussion and analysis. Examples include: instruction in gluing and cutting during the craft portion of programs (Lisa - C7; Sarah - J2); introduction to information about time in incidents involving library wall clocks (Sacha - J3; Fatima - J5; Kim - S2); and opportunities to practise writing using library on-line catalogues (Kim - S2). The public library is not the only place where children could experience opportunities like these. Of note here is the observation that young children use almost anything to explore and further their understanding of the world. We can use this information to help us plan interesting physical facilities and activities which, like the wall clock at Site J, have the potential to stimulate children's curiosity.

7.6 Concluding remarks

We have seen that using the public library indeed does open the "Preschoolers' Door to Learning", including learning about libraries, learning through using library toys and learning about interacting socially with others. Tables XII and XIII indicate that the greatest number of incidents of learning opportunities at the library and at home were connected to the use of library collections, especially stories. Libraries

best open the "Preschoolers' Door to Learning" by providing books for the preschoolers to open. Learning opportunities arising from stories provided by the public library are discussed in Chapter Eight.

CHAPTER EIGHT - LEARNING OPPORTUNITIES ARISING FROM STORIES

Elissa (C2) and her mother were choosing books to borrow when Elissa found *The Very Hungry Caterpillar*, a classic picture book written and illustrated by Eric Carle.

Elissa: You know what?

Mother: What?

Elissa: This is it. This is the caterpillar one.

Mother: What happens to him?

Elissa: Gets big.

Mother: And then what?

Elissa: Then...he gets bigger.

Mother: Uh huh?

Elissa: And then he gets fat.

Mother: Right! And when he finishes eating and getting big and fat what happens at the very end?

Elissa: Butterfly!

Observation Note: Mother laughs joyfully.

This brief excerpt from Elissa's library visit transcript reflects the richness of stories as a source of learning for young children. Elissa's recognition of the book reveals her growing knowledge of children's literature. Through the content of the story, she seems to have learned some information about the life cycle of butterflies. Her ability to retell the story in the proper sequence shows that she understands something about the structure and conventions of stories. Elissa's mother supports her daughter's learning by asking open questions ("And then what?") and affirming Elissa's retelling of the story by repeating it using Elissa's words ("big" and "fat"). I also identified incidents where the children used library books to practise "reading," including decoding text. In this chapter we will look more closely at the kinds of things I saw

children learning through their use of library collections.

8.1 Learning about children's literature

I noted ninety-eight incidents of opportunities to learn about children's literature arising from the use of stories during library visits and the week following. This represents 24.4% of all learning opportunities linked with stories or 15.9% of learning opportunities of all types.

8.1.1 "Because Daddy likes Don Freeman" (Lisa, C7) - Opportunities to learn about specific authors, titles, stories and story characters

Lisa and her father read stories together a lot during the week following her library visit. It seemed logical then that Lisa should seek out books by an author that her father liked and, as she noted later in the visit transcript, that she "really, really" liked too. Don Freeman is a well known author and illustrator of picture books for children. He was one of only two authors identified by name by the children (by both Lisa and Marissa, S5) during the study. Madeline's (C8) mother reported in her diary that Madeline had suggested that a soon-to-be-born sibling should be named Rosemary Wells after an author whose books Madeline enjoyed.

While authors were infrequently identified, particular book titles or the contents of particular stories were recognized by eighteen (60%) of the girls. Kaitlyn's (J6) experience is typical of the incidents of title recognition I found in the library visit transcripts. She and her mother were browsing through the book shelves when the following happened:

Kaitlyn: [Shouting as she pulls the book from the shelf] Hey! There's *The Cat in the Hat*. Mom, we...we...we already had this book, right?
 Mother: Ya.

Even more of the girls, twenty (67%) recognized characters from stories.

Ruthie (S6) and her mother were looking at a display of videos when they found *Diesel's Devious Deed*, one of a series based on popular television shows and books about a small blue engine, Thomas the Tank Engine, and his friends in the railway yard.

Mother: [Pointing to an illustration on the video box] You know who that is.

Ruthie: Messy..

Mother: Who's that?

Ruthie: Messy Thomas the Tank Engine.

Mother: Ya, it is, isn't it? [Ruthie laughs]

The most frequently identified characters were Curious George,²⁸ Babar²⁹ and Thomas the Tank Engine.³⁰ Almost all of the characters the girls recognized were major figures in a number of stories written by the same author.

The prominence of title, story content and character recognition over author recognition is consistent with a study by Wanting (1986) which found that preschool children in public libraries in Denmark most frequently asked for specific books by character or some feature of the content or title. That the children were able to recognize characters, titles and the content of stories suggests that they had some

²⁸ Curious George, a monkey in stories written by H.A. Rey, was identified by six different children.

²⁹ Babar, an elephant in stories written by Jean and Laurent DeBrunhoff, was identified by six different children.

³⁰ Thomas the Tank Engine was identified by five different children.

knowledge of children's literature. As these incidents arose from the use of library materials, it seems likely that use of the library collections contributed to the development of this knowledge of children's literature.

8.1.2 "Where's the bridge?" (Madeline, C8) - Opportunities to learn about traditional stories

Some of the children seemed to be particularly familiar with traditional stories such as nursery rhymes and fairy tales. Madeline's (C8) mother had just started reading *The Three Billy Goats Gruff* to her when Madeline interrupted to ask a question. At this point in the story the main characters, the three billy goats, had just been introduced and were on their way to the bridge under which the evil character, the troll, lived.

Madeline: Mama. Mama. Where's the bridge?

Observation Note: Both Madeline and her mother looked very carefully at the illustration.

Mother: Hmm. We can't see it in this picture can we? Maybe we will see it in the next one?

While this particular version was new to Madeline she clearly knew this story. I also observed children reciting nursery rhymes when they encountered an appropriate stimulus like a rhyme at story time (Lisa - C7; Laura - J1) and joining in a ritual chant from a fairy tale like "Fee, fi, fo, fum.." (Laura - J1). The story time Laura attended had a fairy tale theme. Two of the stories shared by the librarian in the program tested the children's knowledge of traditional literature: *Little Red Riding Hood* presented on the felt board, and *The Fairy Tale Peek-a-Book*, a lift-the-flap book which challenged children to identify various fairy tale characters from clues

given in the illustrations and the text. Laura, and the other boys and girls at the story time, were very successful at predicting what would happen next in the felt board story and guessing the characters in the lift-the-flap book. This suggests that preschool children have a fairly good knowledge of traditional stories which at least partly arises from and is supported by library materials and services.

8.1.3 General comments

Sometimes the girls knew more about particular stories than their mothers and had expertise that surpassed that of the adults around them. Danielle (E4) and her mother were arguing about whether or not they had already borrowed a video when they began to discuss the content of the story on the video.

Mother: We saw this one before.

Danielle: No Mommy. We didn't, we didn't, we didn't see the purple one.

Mother: Ya we did. Because that was the one about the cookies. See..remember when he ate all the cookies?

Danielle: Who?

Mother: Frog and Toad ate all the cookies. That's what that one's about.

Danielle: No, the birdie did.

Mother: Well then they gave it to the birds. That's right.

As children can use videos independently it is not surprising that Danielle was more knowledgeable about this one than her mother. Laura (J1) obviously knew more than her mother about the Jesse bear books, a popular series of board and picture books for toddlers and preschoolers. They were looking at a Jesse bear board book together when the following conversation took place:

Laura: Is this Jesse?

Mother: I don't think so, no. We've never read any Jesse bear books.

Laura: Ya.

Mother: You have?

Laura: When we silent read.

Mother: Oh, you've read Jesse bear books to yourself.

Laura attended junior kindergarten and she was referring to the regular silent reading time in her school day.

Laura was not the only child who encountered stories in settings other than the public library. Anna (S3) first met Franklin, a picture book turtle, at her school. Ties with popular culture, including children's television shows (Thomas the Tank Engine, Barney the dinosaur and Fred Penner) and movies (*The Lion King*, a major Walt Disney production, which was showing in the theatres when I was collecting data), were evident in the study. Sadako's (C3) mother reported that when Sadako made her book club purchase selection in the week after the study visit, she chose to purchase a title that she already knew from the library's collection. In addition to helping children develop knowledge about children's literature, public libraries can support and develop the knowledge about children's literature that their users bring with them from other settings by providing related materials.

Finally, I was able to discern at least one incident of very early literary criticism by one of the girls. Jenna (C5) and her mother were selecting books to borrow. Jenna pulled a story called *What a Good Lunch* (written and illustrated by Shigeo Watanabe) from the shelf. This is one of a series about a bear child and his family. Either the mother or father bear appears in each title. Jenna and her mother had just shared *Just Like Daddy*, a story about another small bear and his mother and father by a different author (Frank Asch).

Jenna: What's this like...*Just Like Daddy*. Two bears. A baby bear and a papa bear.

Mother: That's another one. Ya. It's called *What a Good Lunch*.

Jenna actively compared these two titles. She successfully identified similarities between them and connected the two stories together because of this, compiling in her head the beginning of a thematic bibliography of bear family stories. This reflects Jenna's understanding of the literary world as one which holds a number of different stories which can be more or less similar and which can be organized and understood through critical examination of it.

8.2 Learning from the content of stories

Learning from the content of stories was the most frequent type of learning that I observed during the study, accounting for a total of 174 incidents (43.4% of learning opportunities arising from the use of stories and 28.3% of all incidents of learning opportunities) during library visits and at home.

8.2.1 "What are hang gliders?" (Anna, S3) - Opportunities to learn new vocabulary

Anna, her mother and her younger sister Stephanie were sharing the story *Babar's Little Girl*, when they encountered a scene where Isabelle, the heroine of the story, decides to fly home on a hang glider.

Mother: [Reading from the story] "After a moment of silence Piccardy [Isabelle's friend] said, the quickest way back to Celesteville is to fly on our hang gliders. Does she have the courage..."

Anna: What are hang gliders?

Mother: Hang gliders? They're kind of like an airplane. But they have no motor on them. So what you have to do is you just kind of float on the air. [Reading] "I am strong and brave, replied Isabelle. I would love to fly." [Mother then turned the page. There was a large double

spread illustration, depicting Isabelle and her two friends gliding through the air on hang gliders.] See, there they are. That's a hang glider. Kind of like a kite. Only someone's attached to it. Isn't that wild?

This interaction between Anna and her mother provided a rich and supportive environment for Anna to learn the meaning of a new word. Anna initiated the interaction by asking "What are hang gliders?" Her mother provided a definition building on a concept, airplanes, that she knew Anna already understood. When they encountered the illustration on the next page, Anna's mother used this to expand on and reinforce what she had said. Again, she compared it to something Anna already knew about ("Kind of like a kite"). Finally, her excitement ("Isn't that wild?") acknowledged Anna's interest as being worthwhile. Note that the nature of this interaction is consistent with work within the zone of proximal development as described in section 6.5.1.

I observed fourteen incidents involving ten different children where stories provided an opportunity for the girls to learn new vocabulary. Sometimes, as with Anna's question above, the children initiated the discussion. Other times a mother would offer an explanation when she suspected her child had not understood a word or term. For example, Elissa (C2) and her mother were reading *Funny Bones*, a story about a skeleton dog, when Elissa's mother spontaneously explained the word "skull."

Mother: [Reading] "The big skeleton scratched his skull." You know what a skull is? The bone in your head. [Pointing to the picture] All that bone? That hard stuff? That's called your skull.
Elissa: Oh.

Mothers, like Elissa's, seem able to predict or sense their children's unvocalized

queries. This is not surprising. Mothers know their children very well and capitalize on this knowledge to make themselves effective guides in the zone of proximal development. Other words or terms which were explained during the use of stories included "going bananas," "earth moving equipment," "grapes," "pillar box" and "stray." In this study stories were an important source of raw material, rich and varied language, which children could encounter and master through story sharing with their mothers.

8.2.2 "1..2..3..4..5" (Whitney, E1) - Opportunities to learn traditional preschool academic skills

Stories also provided opportunities for the children to learn and practise some of the traditional academic skills associated with the preschool years like counting, alphabet recognition, colour identification, animal sounds and identification, object identification and telling time. Whitney (E1) shared *Spot Learns to Count* with her mother during her library visit. In the story Spot, a dog, meets a variety of objects and animals which he counts. In their shared reading, Whitney's mother read the text and moved her finger from object to object as Whitney counted the objects.

Mother: [Reading] "Spot counts three little fox cubs." Show Mommy three foxes.

Whitney: [Counting aloud as mother moves her finger from fox to fox] 1..2..3.

Mother: Good girl. [Reading] "Here comes four snails moving slowly." Can you show me four snails?

Whitney: Four. [Counting aloud as mother moves her finger from snail to snail] 1..2..3..4.

Mother: [Reading] "Five beautiful butterflies flutter past."

Whitney: [Counting aloud as mother moves her finger from butterfly to butterfly] 1..2..3..4..5.

Mother: Good.

Whitney: [Whitney turns the page] Now I gotta turn..Oh..look..swims.

Mother: [Reading] "Spot looks up and counts six ducks flying by."

Whitney: [Counting as mother moves her finger from duck to duck]
1..2..3..4..5..6.

Mother: Good. [Reading] "Seven worms come out of their holes to see the ducks." Do you see seven worms?

Whitney: [Counting as mother moves her finger from worm to worm]
1..2..3..4..5..6..7.

Mother: [Laughing] Good.

Whitney: You better not do them this time.

Mother: You don't want Mommy to point to them?

Whitney: No.

Mother: OK. [reading] "Spot counts eight frogs hopping along."

Whitney: 1..2..3..4..5..6..7..8..9..10.

Mother: Whoops..whoops..We only want eight. Count them again.

Whitney: 1..2..3..4..5..6..7..8.

Mother: That's it. [Pointing to two frogs that Whitney had counted twice on her first attempt] You counted those ones already. That was eight.

Whitney's mother also used many strategies that we have already seen to be characteristic of effective work within the zone of proximal development. She structured the task for her daughter, reading a segment of the text and prompting and guiding Whitney's counting by pointing to the objects. She honoured Whitney's request to take on more responsibility for the task by agreeing to let Whitney point at the objects herself. When an error was made she did not get angry but showed Whitney what had gone wrong. She provided positive feedback throughout this reading.

In all fourteen children (46.7% of the sample) were observed using opportunities arising from stories to learn traditional preschool tasks. Like Whitney, they usually received assistance from their mothers.

8.2.3 "Daddy puts his penis in his sperm" (Raya, C1) - Opportunities to learn factual information

Books were also the source of factual information for many (seventeen, 56.7% of the sample) of the girls. Raya's (C1) mother was pregnant. During their library visit she looked for and borrowed books for Raya and her older sister about the topics of pregnancy and childbirth. These were shared with both girls at home during the week following the visit. The information in the books was discussed several times throughout that week. As can be seen from the following excerpt from Raya's mother's diary, Raya had begun to understand where babies come from.

Diary excerpt: Dinnertime - Somehow got onto the topic of how babies are made again! Raya - "Daddy puts his penis in the sperm." (Near!)
6:30 pm - Re-read *Where Did I Come From?* to clarify the issue!

In the follow-up interview Raya's mother told me that she often looked for books to explain or enrich experiences in the children's lives. This approach was acknowledged by several of the others including Madeline's (C8), Whitney's (E1) Elizabeth's (E2), Sarah's (J2), and Fatima's (J5) mothers.

Whitney (E1) borrowed *Giant Dinosaurs* by Eric Rowe. On the second day after her library visit, her mother recorded this in the diary:

9:00 am - Whitney is amazed by all animals and has taken a distinct liking to dinosaur books. She enjoys all the information and pictures given to her in the book.

A later entry for the same day reports on a visit by Whitney's Portuguese speaking grandmother:

I couldn't help but grin as Whitney insisted Grandma pronounce the different dinosaur names. As Grandma feverishly tried, Whitney said

"It's okay Grandma, you just need to practice."

My data include several other examples like this. Stories, it seems, are a source of information not only for children, but also for the adults in their families.

Factual information explored through stories by the children during the study involved many and widely diverse topics. In addition to dinosaurs and human sexuality, other topics which arose in the forty incidents identified in the study include geese, the moon, India, watermelon seeds, valets, rice, death and bears. Books provide almost unlimited opportunities for young children to learn factual information of all sorts.

8.2.4 "I'm a little teapot.." (Laura, J1) - Opportunities to learn poems and songs

Six of the children were exposed to stories in the form of songs and poems through nonbook media like videos, audio-cassettes and live telling at story time. Mothers reported observing their children reciting or singing poems and songs they had learned at the library. I identified thirty-seven incidents of this sort of learning opportunity, with by far the most related to the story times that Lisa (C7) and Laura (J1) attended. In the following excerpt Staff1, to provide an active break between stories at preschool story time, is leading the children in the action song "Sticky, sticky, sticky bubble gum."

Staff1: Ooooh dear. I got sticky bubble gum. Shall we do our sticky, sticky bubble gum song?

Laura: Ya.

Staff1: OK. Let's do that one. OK. Do you remember how that goes?

Laura: Ya.

Staff1, Laura and a few other children: [Singing] Sticky, sticky, sticky, sticky bubble gum, bubble gum, bubble gum. Sticky, sticky, sticky, sticky bubble gum, sticking my finger to my nose.

Observation Note: Staff1, Laura and a few other children have stuck their fingers to their noses.

Staff1: Oh dear. OK. Are you ready? [Pulling her finger away from her nose] Unstick! Pull! [Laura and few other children unstick their fingers.]

Laura continued to sing and do all the actions as the group of children led by Staff1 sang through several more verses of this song. Later in the week Laura's mother noted that she sang this song to herself as she played one day and again on another day while tidying up her toys. In the follow-up interview Laura's mother told me that this seemed to be a new song for Laura and that the library story time was a major source, along with Laura's junior kindergarten classroom and a playgroup that she attended, for learning new verses and songs.

8.2.5 "Do you know Mike Mulligan?" (Fatima, J5) - Opportunities to make sense of the world

The most interesting aspect of learning through the content of stories that I observed is what I call story informing life and life informing story. I identified forty-seven incidents where two thirds of the children (twenty) linked something in a story to something they knew about through life experiences or, conversely, made allusion to something from real life to illuminate what was happening in a story.

Rebecca (S4), her mother and her younger sister Nicole were reading *Curious George Goes to the Hospital*, a story about a monkey who gets a stomach ache because he has swallowed a piece of a jigsaw puzzle. Nicole began to cry. Her mother was convinced that she had to go to the bathroom.

Nicole: Mom. I don't need to go to the bathroom.

Mother: Well, what's the matter with you?

Nicole: [Wailing] I don't know. I want you to carry me.

Rebecca: Maybe she swallowed some of the jigsaw puzzle too.

Mother: [Laughing] You know what? Maybe we should just take this book home with us and finish reading it.

Later in the week, when Nicole was still not better, Rebecca offered the same explanation for her sister's malady. *Curious George Goes to the Hospital* had given Rebecca an interesting and reasonable explanation about the cause of stomach aches which she was able to apply to a real experience in her life.

Katie (J7) and her mother were reading a story called *Clifford's Family*.

Clifford is a big red dog. In this story Clifford's sister Claudia is a seeing eye dog.

Katie had some difficulty understanding what this meant.

Mother: Do you remember? What's she doing? What's her job?

Katie: I don't know.

Mother: Look. What is she doing? [Pointing to the lady that Claudia is leading] This lady. She's got dark sunglasses on.

Katie: Uh huh.

Mother: And she's holding the leash.

Katie: [Said concurrently with mother]...the leash.

Mother: So what's Claudia doing? She's working. Remember?

Katie: Who?

Mother: You see those puppies around the city. She's a working dog.

She's a seeing eye dog. She's helping this person walk because they can't see. Remember? We see them on the buses. With the big leashes on?

Katie: Uhm hmm.

Mother: Uhm hmm. You call them working dogs.

In this incident Katie's mother reminded her of experiences from her own life to help her understand what was happening in the story.

Stories not only helped children make sense of life experiences while they were being read, but were referred to when a puzzling situation was encountered in a non-story sharing context. Fatima had recently read *Mike Mulligan and His Steam*

Shovel, a story about how a boy named Mike Mulligan and his steam shovel Mary Anne together excavate the cellar for a new town hall. Fatima (J5) was at a grocery store with her mother when the following incident, reported in the diary, took place:

Fatima: [To cashier] What's your name?

Cashier: Mary Anne.

Fatima: Mary Anne! [To Mom] Like Mike Mulligan.

Mother: Yes.

Fatima: [To cashier] Do you know Mike Mulligan?

Cashier: What?

Fatima: You're a truck!

Cashier: Nobody ever called me a truck before. Who's Mike Mulligan?

Mother: He's in a book. Mary Anne is his steam shovel.

Fatima: [To Mom] She's Mike Mulligan.

Mother: Is that what she said?

Fatima: Yes, she's Mike Mulligan.

Mother: I don't think that's what she said.

Fatima: No, she's Mary Anne.

Preschoolers are still in the process of coming to understand the difference between stories and real life. While Fatima appeared a bit confused for a moment, assuming that since the cashier was not a truck (or steam shovel) she must be the person (Mike Mulligan) in the story, she managed to sort this out quite quickly ("No, she's Mary Anne"). In this case, Fatima's recall of the story, her attempt to use it to make sense of a situation she found herself in, was not very productive. However, it does show how children spontaneously use what they know from stories to help understand real life experiences.

Some of the children also used stories to explain things to others. At bed time, Catherine (C4) sat nearby while her mother read some stories to her younger sister Meredith. Mother's diary describes the following incident:

Animal Builders by Kenneth Lilly. Meredith points to the mouse with a

blade of grass in its mouth and cries out with excitement. Catherine explains to Meredith that the mouse collects grass to build a home for itself. "He will sleep there Meredith like you sleep in your crib."

Two thirds of the girls used stories to help them make sense of their worlds. They asked questions during stories, linked events in real life with stories and events in stories with real life. As with the incidents of opportunities to learn factual information, themes were diverse including pets, going to school, bird feeders, skipping, window cleaning and paper cranes. This behaviour is consistent with that found by Wells, reported in his work *The Meaning Makers* (1986), and Tizard and Hughes, reported in their work *Young Children Learning* (1984), which were discussed in Chapter Two.

8.3 Learning about the structure of stories

I identified seventy-one incidents of opportunities to learn about the structure of stories during the library visits and the week following. This represents 17.7% of all learning opportunities arising from stories or 11.5% of learning opportunities of all types. Opportunities were evident for the children to learn about the physical features of stories and books, types and characteristics of stories, parts of stories and the sequence of stories.

8.3.1 "It goes this way," (Mother of Kaitlyn, J6) - Opportunities to learn about the physical features of stories and books

I identified only three incidents where the children mentioned or were given information about the physical features of books. Kaitlyn's (J6) mother showed her

daughter how to orient a book correctly. It is not surprising that there were not more incidents related to how to handle books (how to hold them, how to turn the pages, where to start, etc.) as research has shown that most children acquire these skills before they are four years old (see, for example, Snow and Ninio 1986). Marissa (S5) was delighted to discover that the illustration on the cover of the back of the book *The Happy Lion* was the same as the one on the front. Sacha (J3) referred several times to the large number of pages in *Wolfie*, an easy-to-read book which had about twice as many pages as the picture books she had more experience with. While the children had a few opportunities to learn about the physical features of books, there did not seem to a lot of interest in this at this age.

8.3.2 "But it doesn't have any reading in it." (Marissa, S5) - Opportunities to learn about the types and characteristics of stories

Marissa (S5) had found a wordless picture book on the shelf. Her mother then explained to her that some books did not have any words and that you had to make up the story from the pictures. Marissa had learned what a wordless picture book was. She did not like it and did not choose this title for borrowing. Children learned about other types of stories during the study. Emily's (E7) mother explained what a multi-media kit was. Elissa (C2) discovered books with chapters. Danielle (E4) and Fatima (J5) learned about novels, which were described by their mothers as being longer and for older children. Other incidents of opportunities to learn about the characteristics of stories included discussions about a book that identified items rather than telling a narrative story (*Spot's Big Book of Colors, Shapes and Numbers*; Genevieve - E8),

short stories (Hannah - S7), stories suited to younger children (Anna - S3) and an explanation that some stories had more than one version given by Staff1 in Laura's (J1) story time. In all, I identified eleven incidents about the nature and types of stories in the study. This indicates that using stories and books does provide chances for children to learn about the general types and characteristics of these materials.

8.3.3 "Once upon a time there were three billy goats" (Madeline, C8) - Opportunities to learn about the parts of stories

Madeline, who could not actually read or decode text, was looking through *The Three Billy Goats Gruff* when she began to tell the story aloud to herself. She used the ritual fairy tale opening, "Once upon a time," a literary convention that is found only in stories and not in everyday language. I identified several incidents like this in the data, as well as others where children used the ritual closing, "The end," upon finishing a story. I interpreted this to mean that some of the children understood and were able to replicate literary language like ritual openings and closings for stories.

Mothers mentioned other parts of stories as well. They frequently (twenty-three incidents) identified and read out titles at the beginning of each story. One mother (Maggie's - S1) identified the author of the book. Another (Jenna's - C5) read the dedication statement.

I was just leaving Chloe's (C6) house after having completed the follow-up interview when her mother stopped me. The tape recorder was off but as soon as I was in my car I made the following note about my conversation with her.

Interview Field Notes: She pointed to a small grouping of toys nested amongst flower pots on a window ledge and said [paraphrase] "Chloe makes up little stories with her things all the time. Yesterday she storied those toys while I did the dishes. I couldn't hear the story but I knew it was a story. Where did she learn to story? From the library books."

My data include twenty-one examples which show the children using books to learn "to story." This was most evident in the diary transcripts which account for all but two of the incidents. The children "storied" either by retelling or acting out stories from books that had been read to them. For example, Elizabeth's (E2) mother noted this incident in her diary:

3 p.m. *The Year at Maple Hill Farm*. We read the balance of the book that we had started on July 29. She pretended to be the white horse in the book.

Elizabeth was present during the follow-up interview. I asked her mother about this entry. Elizabeth immediately began to prance around the room and neigh like the white horse, acting out several scenes of the story as the interview continued. Sacha's (J3) mother made the following entry in her diary:

She got out the Thomas book and used the pictures to (orally) tell a story...She made up text for each picture and finished with "The End."

Both girls, like the other eleven children who participated in similar activities, had learned to story. The incidents I identified all were linked to the use of library books suggesting that experience with books gives children a good sense of stories and how they work, an emergent literacy skill (see, for example, Teale 1982).

8.4 Learning about reading

Gillian (E6) had asked her mother to find *The Cake That Mack Ate*, a story that she particularly enjoyed and with which she was very familiar. They sat down on the couch at Site E to read the book together. The following is an excerpt from their shared reading of this title. Note that Gillian's mother was actually reading the text in the book. This is indicated by enclosing the portions she read in quotation marks.

Mother: Do you want to read this? Or do you want me to read it to you?

Gillian: I can read it.

Mother: You can read it yourself?

Observation Note: Sound of pages turning as Gillian opens the book to the beginning of the story.

Mother: It says "This is the cake..." [Mother pauses to allow Gillian an opportunity to finish the sentence]

Gillian: ...that Mack ate.

Mother: Uhm hmm. "This is the hen..." [Pausing]

Gillian: ...that laid the egg...[Pausing]

Mother: ..."that went into the cake..." [Pausing]

Gillian: ...that Mack ate.

Gillian and her mother finished this story, with Gillian contributing longer and more complex portions to the "reading." In the week following the visit, Gillian's mother observed her "reading" this story aloud to herself four more times. This episode vividly exemplifies much of the behaviour that I interpreted as evidence to support the idea that the use of library materials provided opportunities for the children to learn how to read. Furthermore Gillian believed that she was reading. Other children, including Sacha (S3), Fatima (J5), Kim (S2), Marissa (S5) and Hannah (S7), made similar statements after they had "read" a book.

Gillian was clearly able to use prediction to complete the phrases partially read

by her mother. Gillian's mother paused to allow her an opportunity to try to complete the phrases. This strategy was used by other children and their mothers, especially with repetitive or cumulative stories like *The Cake That Mack Ate* or stories that a child already knew well. I identified eighteen incidents, involving seven different children, of "reading" by predicting words or phrases which would come next in a story. Other examples include Elissa (C2) completing the much repeated phrase "In a dark, dark..." in her reading of *Funnybones* with her mother, and Jenna (C5) adding the repeated phrase "Just like daddy" to her shared reading of the story *Just Like Daddy*.

Gillian knew the story *The Cake That Mack Ate* so well that she had pretty well memorized it. Altogether there were eleven incidents of this type of "reading" in the data, involving six different children. Other examples include Kim (S2) who memorized and then "read" the book title *Curious George Rides a Bike* and Rebecca (S4) who memorized the story *Willy Can Count* and then "read" it aloud to her younger sister several times in the week following the library visit. In the follow-up interview Kaitlyn's (J2) mother explained her experience of this phenomenon with her daughter.

She can't read. I think she mostly memorizes. She has the same favourite books. *The Cat in the Hat*. She can memorize a few pages and basically tell you the story reading through the book. It's not that she can read or anything. It's the way I read to her.

Gillian also mimicked reading behaviour, using a reading tone of voice and holding the title up so that her mother could see the pictures. Altogether nine children in twenty-five separate incidents did this. Most of them, not having memorized the

story like Gillian, used the pictures and/or prior knowledge of the story to prompt their oral retellings. Sarah's (J2) mother described this type of reading in her diary.

We have some books in her room and some on the coffee table. She spends a good amount of time just glancing [through] books, sometimes pretending to read words. Most times, she can repeat [the] story from [the] pictures. Usually giving extra details from her imagination.

Gillian did not attempt actually to decode the text of *The Cake That Mack Ate*.

While none of the children in the study were fluent decoders of text, I was able to observe five brief episodes where Jenna (C5), Laura (J1) and Katie (J7) attempted to do some decoding. Jenna initiated the following session. She had pulled *A Chair For My Mother* by Vera Williams from the picture book shelves. This story is about a little girl, her mother who works in a diner and her grandmother. Jenna and her mother had been looking for a book to read together in the library.

Jenna: Mommy. Let me see if I can read it. [Sounding out the letters]

Aaa...ku...ah...eh...I'll just make..

Mother: No. The C and the H together make Ch.

Jenna: Ch...

Mother: I'll give you a hint. It's something you sit on.

Jenna: Chair.

Mother: Right. A chair..

They continued to work on this until Jenna had managed, with a lot of support from her mother, to decode the entire title. They read this story together in the library and then borrowed it to use at home. On the cover of this book, the title of the story appears in the sign on the diner, where the heroine's mother works. The diner appears in an illustration within the story as well, although in that context the sign bears the name of the diner, "The Blue Tile Diner," rather than the title of the book. Jenna's mother made this note in her diary:

Jenna remembered from first reading. When she saw the sign in the diner, illustrated in the same blue tile lettering on the front of the book, Jenna read it as "A Chair for My Mother" when it said "Blue Tile Diner." Everything else in the picture was the same as the cover.

Jenna, like fluent readers, had used visual clues, in this case from the illustrations, and her memory to predict what a text said.

For Jenna and other children observed decoding text in the study, this was a difficult, tiring and infrequent task. Nonetheless all seemed to enjoy their brief episodes of decoding. They all felt that they were really "reading." The mothers, like Jenna's, supported their daughters in this sense of themselves as successful readers. As the decoding episodes were embedded in a pleasurable experience, the children, like Jenna who reread this story at home, were willing to return to this task again.

There were fifty-five incidents of "reading" in the library visit and diary data, representing 13.7% of opportunities for learning arising from the use of stories or 8.9% of all incidents of opportunities for learning. The types of reading behaviour which became evident fell into four broad categories: using prediction to participate in "reading," "reading" memorized material, mimicking "reading" behaviour, and actually decoding text. All of these behaviours have been observed before in studies of preschoolers and story reading (see review articles by Mason and Allen 1986; Hall 1987; Shapiro and Doiron 1987; Sulzby and Teale 1991; and Teale and Sulzby 1986) and are characteristic of what Sulzby and Teale (1991) tell us is commonly referred to as independent reenactments or emergent story readings. Using public library materials clearly provided the children in this study with opportunities to learn about reading.

8.5 Concluding remarks

The results of this study suggest that public library materials, especially stories, provide opportunities for young children to learn about children's literature, to learn information from the content of stories, to learn about the structure of stories and to learn about reading. Almost two thirds of the learning opportunities identified in this study during thirty actual library visits and library-related activities in the week following these visits, arose from the use of library collections. Provision of stories, more than any other library service, seems to best support the learning of young children. Public libraries are almost the only source of large collections of books and other story and information materials for very young children who do not yet have access to school library collections. While children may read their own books, large and diverse collections are needed to introduce them to the rich and important world of literature and stories. The best way for public libraries to open the "Preschoolers' Door to Learning" is to continue to provide collections of materials for preschoolers to use independently and, most importantly, with parents and other adults including library staff members who help the children with their emergent reading and information seeking. As Chloe's (C6) mother said: "Where did she learn to story? From the library books."

CHAPTER NINE - DISCUSSION AND IMPLICATIONS

This chapter discusses the results of this study. It suggests ways that the findings can guide further research and practice. The chapter concludes with a summary of the major contributions made by this study to research and to the practice of children's librarianship.

9.1 The use of public libraries by preschool girls

This study attempted to identify what preschool girls do when they visit their local public libraries and how they use library materials in the week following their library visits. These results were reported in detail in Chapters Four and Five. While some of the children played, interacted socially with others, attended a library program or used washroom facilities, one of the strongest findings of the study was the importance of the library collections themselves during library visits and at home. Selection of materials was the *only* activity that all the children participated in during their visits. Furthermore, the study contributes to the very small body of research on what actually is done with library materials once they have been taken home. Borrowed materials were heavily used at home, read more than once and shared with siblings and other family members.

The children were exposed to many opportunities for learning while they used library materials and services, a finding that suggests that public library services have the potential to make a major and measurable impact on the learning of preschool

girls. Two important types of learning opportunities that were observed included opportunities to learn about libraries and how they work and opportunities to develop emergent literacy skills through the use of library materials. These results were reported in detail in Chapters Six, Seven and Eight.

One of the reasons public libraries provide services to children is to encourage lifelong use of the library. In this study, the children seemed to be learning about libraries and how they worked. They did this mostly by using the library -- participating in routine library operations like the return and check out of materials, catalogue searches, and shelf retrievals. Libraries can help children with this learning by making library operations more visible and by inviting children's observation and participation. Library policies about access to materials and services and about library furnishings and equipment must be consciously developed to allow for this type of learning. Children can not begin to learn about how to search for a book in the catalogue unless they have access to the catalogue. A stool allows children to observe transactions at an adult-height circulation desk.

Mothers emerged as key players in their daughters' use of library services. During their shared use of stories, they enabled their daughters' learning within Vygotsky's zone of proximal development. There were few interactions between the children and library staff. This study suggests that the major way in which public libraries can contribute to preschoolers' learning is through the provision of materials that the children can use with a caring and skilled parent. Children need access to more skilled individuals to help them grow within the zone of proximal development.

Libraries must recognize and support parents in this role. Libraries may also want to reconsider their role in this process and look at ways to increase and improve interactions between children and staff. At the circulation desk I observed many lost opportunities for interaction between children and staff within the zone of proximal development. Staff could initiate and encourage more conversations with children to give them opportunities to learn about library and emergent literacy skills.

Effective strategies used by parents to support their children's learning could be taught to others, including library staff and other parents and adult caretakers, who do not have these skills. Special workshops could be designed to do this. Once competent, library staff could use and model these strategies during interactions with children at story times, or at the reference and circulation desks. Public library staff could help parents by sharing their expertise in children's literature with them through careful selection of the best possible materials for parents to use with their children and through the provision of displays, booklists and pathfinders to enhance access to materials. As shared reading was the context in which most learning opportunities happened, library spaces should include areas for parents and preschool children to share stories together. The public library is the only universally accessible source of the large collections of stories and other books that children need to develop their understanding of the world of literature and reading. Other services, including the provision of play materials and programs should support the important role of stories in children's lives. Programs and toys could be linked to collections.

9.2 Suggestions for further research

This study provided an in-depth look at a moderately large sample (thirty subjects) of preschool girls and their use of the public library services provided in four sites of one large Canadian public library system. This study could be extended to or replicated with other user groups and/or other locations. For example, a similar study could be conducted with a sample of preschool boys, in order to identify differences in the way that preschool boys use public libraries. The study could also be conducted with fathers, as opposed to mothers, in order to see if fathers interact differently with their preschool children during library visits and the use of library materials. The study could also be replicated in other public libraries. This would help to determine which of the findings are transferable to public library settings in general. Varying the size (small through large) of public library, would allow an examination of the influence of the variable of size on the findings. As this qualitative study seems to have successfully identified the major themes related to the use and impact of public library services for preschool girls, a less expensive method such as time/event sampling observation (Boehm and Weinberg 1987; Irwin and Bushnell 1980; Medinnus 1976; Touliatos and Compton 1983) using a checklist of behaviours derived from the categories identified in this study, could be used to collect data with larger samples of children in a variety of field settings. This would provide quantitative data to complement the qualitative data collected in this study.

Another important research question is to ask if and how children's use of public library services changes as they mature. During the follow-up interviews, all

the mothers indicated that they would be willing to participate in further studies. I hope to do a series of longitudinal studies with this same group of girls, collecting more data at times when their use of the library is likely to have changed because of their developmental growth and differences in their life contexts. For example, I anticipate studying the girls after they have completed grade one, their first year of universal formal education. This is an important time as most will have begun to read and the school will have emerged as a key agency in their lives. These changes in their lives are likely to be reflected in changed use of public library services. Longitudinal studies will also allow an examination of the continuing impact, if any, that early public library use has on later public library use and general success in life. The application of Vygotsky's developmental theory, especially the concept of the zone of proximal development, could be studied to see how it might apply to children's learning arising from the use of public libraries throughout childhood.

Finally, the children in this study could be compared with a sample of children who are not public library users to see if there are differences in the opportunities to acquire emergent literacy skills.

9.3 Value of the study

The results of this study have implications for researchers, practitioners and educators concerned about the use of public libraries by young children. The study contributes to our knowledge of public library use by being the first study using empirically-derived data to describe what happens when preschool girls visit their

local public libraries and how they use library materials in the week following their visits. Public libraries should find this information helpful when developing policies, planning the physical environment, recruiting and training staff, planning services, and, allocating resources for children's departments.

Methodologically, this study contributes to a small but growing body of research in the field of library and information science which uses the naturalistic paradigm. It is the first study to explore library use by preschoolers from the perspective of the children themselves by successfully using the children's own talk and actions as the major sources of data. This study demonstrates one way the methods of naturalistic inquiry may be modified and applied to preschool children as subjects.

Vygotsky's concept of the zone of proximal development provided a useful theoretical context for data analysis. An increasing amount of work is being done in the discipline of education using Vygotsky's developmental theory (see Lecompte, Millroy, and Preissle 1984). However, this is the first study I am aware of to use this theoretical approach in research about children's use of library services within the discipline of library and information science. Public libraries can use information about effective strategies for working within the zone of proximal development to train staff, parents and other adult caretakers of children so that they may enhance children's learning while using library materials and services.

The results of this study also support the contention that public library services play an important role in young children's learning, particularly in terms of learning

opportunities related to emergent literacy skills which arise from the use of stories and other library materials. This is one of only a few studies that have attempted to measure the impact of public library services for children and the only one that I am aware of which looks at the impact on preschooler's learning. Literacy skills are valued by contemporary North American society. As publicly funded institutions that must be accountable for their use of resources, libraries should be able to use this information on their role in supporting emergent literacy as a compelling justification for requests for public funds.

Library staff and parents can use the opportunities for learning provided by the zone of proximal development to help young children like Marissa (S5) confidently state "I readed it!". Public libraries do indeed open the "Preschoolers' Door to Learning".

BIBLIOGRAPHY

- Alliance for excellence: librarians respond to a nation at risk. Recommendations and strategies from libraries and the learning society.* Washington, D.C.: U.S. Department of Education, 1984.
- American Library Association. *Standards for children's services in public libraries.* Chicago: American Library Association, 1964.
- _____. Implementing the national goals for education through library service. *Journal of Youth Services in Libraries* 4(1991):331-4.
- American Library Association. Public Library Association. *Statistical report '95: Public Library Data Service.* Chicago: American Library Association, 1995.
- American Library Association Task Force on Excellence in Education. "Realities: Educational reform in a learning society. A statement by the American Library Association Task Force on Excellence in Education." *Bookmark* 43(1984):45-52.
- American Library Directory 1995/96.* 48th ed. New Providence, N.J.: R.R. Bowker, 1995.
- American Psychological Association. Ethical standards for developmental psychologists: Statement of Division of Developmental Psychology of the American Psychological Association. *Newsletter* (1968): 1-3.
- Anderson, A.B., W.H. Teale, and E. Estrada. Low income children's preschool literacy experiences: Some naturalistic observation. *Quarterly Newsletter of the Laboratory of Comparative Human Cognition* 2(1980):59-65.
- Ari, Meziyet, and Gonen, Mubeccel. Picture story books and language development: A Turkish study. *Bookbird* 27(1989):12-3.
- Babbie, Earl. *The practice of social research.* 6th ed. Belmont, Calif.: Wadsworth, 1992.
- Ball, S. J. Participant observation. In *Educational research, methodology and measurement: An international handbook*, edited by John P. Keeves. Oxford: Pergamon Press, 1988.
- Bee, Helen. Sex differences in development. In *The developing child.* 6th ed. New York: Harper Collins, 1992.

- _____. Father-child bonds. In *The developing child*. 6th ed. New York: Harper Collins, 1992.
- Benne, Mae. *Principles of children's services in public libraries*. Chicago: American Library Association, 1991.
- Berelson, Bernard. *The library's public*. New York: Columbia University Press, 1949.
- Berk, Laura E. To what extent do boys and girls really differ in cognitive abilities and personality attributes? In *Child development*. 2d ed. Boston: Allyn and Bacon, 1991.
- Berndt, Thomas J. Learning how to communicate: The development of pragmatics. In *Child development*. Fort Worth, Tex.: Harcourt Brace Javonovich College Publishers, 1992.
- _____. Mothers and fathers: Their different (and unique) roles. In *Child development*. Fort Worth, Tex.: Harcourt Brace Javonovich College Publishers, 1992.
- _____. A sampling of the evidence on sex differences. In *Child Development*. Fort Worth, Tex.: Harcourt Brace Javonovich College Publishers, 1992.
- Binkley, Marilyn R. *Becoming a nation of readers: What parents can do*. Washington, D.C.: U.S. Department of Education, 1988.
- Boehm, Ann E., and Richard A. Weinberg. *The classroom observer: Developing observation skills in early childhood settings*. 2d ed. New York: Teachers College Press, 1987.
- Bradbard, Marilyn R., and Richard C. Endsley. How can teachers develop young children's curiosity? What current research says to teachers. *Young children* 35(July 1980):21-32.
- Caty, S., M.L. Ellerton, and J.A. Ritchie. Coping in hospitalized children: Analysis of published case studies. *Nursing Research* 33(1984):277-82.
- Chang, Gen Lin, and Gordon Wells. The literate potential of collaborative talk. Paper presented at the meeting of the International Oracy Convention, Norwich, Norfolk, England, March 30 - April 3, 1987. ED 288 222.
- Chatman, Elfreda A. Field research: Methodological themes. *LISR* 6(1984):425-38.
- Chelton, Mary K. Evaluation of children's services. *Library Trends* 35(1987):463-84.

- _____. Evaluating the impact of federally funded public library youth programs. In *Library programs: Evaluating federally funded public library programs*, LP 90-755, 55-65. Washington, D.C.: U.S. Department of Education, 1990.
- The Chicago manual of style*. 14th ed. Chicago: University of Chicago Press, 1993.
- Clark, Margaret Macdonald. *Young fluent readers*. London: Heinemann, 1976.
- Clay, Marie M. *Reading: The patterning of complex behavior*. Auckland: Heinemann, 1979.
- Cobb, Jane, ed. *Guidelines for children's services in public libraries in B.C.* Burnaby, B.C.: British Columbia Library Association, 1990.
- Cochran-Smith, Marilyn. *The making of a reader*. Norwood, N.J.: Ablex, 1984.
- Cohen, LeoNora M. Understanding the interests and themes of the very young gifted child. *Gifted Child Today* 12(1989):6-9.
- Congress moves towards 1989 "The year of the young reader." *Library of Congress Information Bulletin* 47 (1988):209-210;212.
- Connor, Jane Gardener. *Children's library services handbook*. Phoenix, Ariz.: Oryx Press, 1990.
- Cooke, Eileen D., ed. America 2000. *School Library Media Quarterly* 20(1991):43-4.
- D'Elia, George. The development and testing of a conceptual model of public library user behavior. *Library Quarterly* 50(1980):410-30.
- D'Elia, George, and Eleanor Jo Rodger. Public opinion about the roles of the public library in the community: The results of a recent Gallup poll. *Public Libraries* 33(1994):23-8.
- _____. The roles of the public library in the community: The results of a Gallup poll of community opinion leaders. *Public Libraries* 34(1995):94-101.
- Denzin, Norman K. *The research act: A theoretical introduction to sociological methods*. 3d ed. Englewood Cliffs, N.J.: Prentice Hall, 1988a.
- _____. Triangulation. In *Educational research, methodology and research: An international handbook*, edited by John P. Keeves. Oxford: Pergamon, 1988b.

- Dervin, Brenda. The information needs of Californians - 1984: Report #2. Davis, Calif.: University of California at Davis, Institute of Government Affairs, 1984.
- _____. From the mind's eye of the user: The sense-making qualitative-quantitative methodology. In *Qualitative research in information management*, edited by Jack D. Glazier and Ronald R. Powell. Englewood, Colo.: Libraries Unlimited, 1992.
- Dervin, Brenda, and Michael Nilan. Information needs and uses. In *Annual review of information science and technology*, vol. 21, edited by Martha E. Williams. White Plains, N.Y.: Knowledge Industry Publications, 1986.
- Dewdney, Patricia. Recording the reference interview: A field experiment. In *Qualitative research in information management*, edited by Jack D. Glazier, and Ronald R. Powell. Englewood, Col.: Libraries Unlimited, 1992.
- Diesing, Paul. *Patterns of discovery in the social sciences*. New York: Aldine, 1971.
- Director - Planning/Research, Study Library. Interview with author. 24 August 1993.
- Drum, P.A. Language acquisition and human development. In *The encyclopedia of human development and education: Theory, research and studies*, edited by R. Murray Thomas. Oxford: Pergamon Press, 1990.
- Durkin, Dolores. *Children who read early*. New York: Teacher's College Press, 1966.
- Edwards, Carolyn P., and Michael Lewis. Young children's concepts of social relations: Social functions and social objects. In *The child and its family*, edited by Michael Lewis, and Leonard A. Rosenblum. New York: Plenum, 1979.
- Endsley, Richard C., M. Ann Hutcherson, Anita P. Garner, and Michael J. Martin. Interrelationships among selected maternal behaviors, authoritarianism, and preschool children's verbal and nonverbal curiosity. *Child Development* 50(1979):331-9.
- Erlandson, David A., Edward L. Harris, Barbara L. Skipper, and Steve D. Allen. *Doing naturalistic inquiry: A guide to methods*. Newbury Park: Sage, 1993.
- Ethnograph v4.0: A program for the analysis of text based data. Qualis Research Associates, Amherst, Mass.

- Fasick, Adele M. *Managing children's services in the public library*. Englewood, Colo.: Libraries Unlimited, 1991.
- Ferguson, L.R. The competence and freedom of children to make choices regarding participation in research: A statement. *Journal of Social Issues* 34(1978):114-21.
- Fine, Gary Alan, and Barry Glassner. Participant observation with children. *Urban Life* 8(1979):153-74.
- Fine, Gary Alan, and Kent L. Sandstrom. *Knowing children: Participant observation with minors*. Qualitative Research Methods Series, no. 15. Newbury Park: Sage, 1988.
- Fitzgibbons, Shirley Grinnell. Accountability of library services for youth: A planning, measurement and evaluation model. In *Library performance, accountability, and responsiveness: essays in honor of Ernest R. DeProspero*, edited by Charles C. Curran, and F. William Summers. Norwood, N.J.: Ablex, 1990.
- Foust, Judith M. Learning begins before schooling. *Bookmark* 50(1991):69-71.
- Freund, Lisa S. Maternal regulation of children's problem-solving behavior and its impact on children's performance. *Child Development* 61(1990):113-26.
- Gagnon, Ann. *Guidelines for children's services*. Library services to children, no. 1. Ottawa: Canadian Library Association, 1989.
- Garbarino, James, and Frances M. Stott. *What children can tell us: Eliciting, interpreting and evaluating information from children*. San Francisco: Jossey-Bass, 1990.
- Glaser, Barney G., and Anselm L. Strauss. *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine, 1967.
- Goodman, Yetta M. Children coming to know literacy. In *Emergent literacy: Writing and reading*, edited by William H. Teale and Elizabeth Sulzby. Norwood, N.J.: Ablex, 1986.
- Goodsitt, Jan, Jayne Grady Raitan, and Marion Perlmutter. Interaction between mothers and preschool children when reading a novel and familiar book. *International Journal of Behavioral Development* 11(1988):489-505.

- Goodwin, William L., and Laura D. Goodwin. The use of nonreactive measures with preschoolers. *Early Child Development and Care* 41(1989):173-94.
- Greene, Ellin. Early childhood centers: Three models. *School Library Journal* 30(February 1984):21-7.
- Hall, Nigel. *The emergence of literacy*. Portsmouth, N.H.: Heinemann, 1987.
- Hall, William S., Elsa Bartlett, and Alva T. Hughes. Patterns of information requests. In *Black children and poverty: A developmental perspective*, edited by Diana T. Slaughter. New directions for child development, vol. 42. San Francisco: Jossey-Bass, 1988.
- Harvey, David. Helping children make sense of the world. *Elements: A journal for elementary education* 15(Spring 1984):3-6.
- Haycock, Ken. *The school library program in the curriculum*. Englewood, Colo.: Libraries Unlimited, 1990.
- Hayden, Ruth. Mediating story book experiences. Paper presented at the annual meeting of the International Reading Association, Anaheim, Calif., 3-7 May, 1987. ERIC document 283138, May 1987. Microfiche.
- Heath, Shirley. Brice. The functions and uses of literacy. *Journal of Communication* 30(1980):123-33.
- Henderson, Bruce B. The social context of exploratory play. In *Child's play: Developmental and applied*, edited by Thomas D. Yawkey, and Anthony D. Pellegrini. Hillsdale, N.J.: Lawrence Erlbaum, 1984a.
- _____. Parents and exploration: The effect of context on individual differences in exploratory behavior. *Child Development* 55(1984b):1237-45.
- _____. Social support and exploration. *Child Development* 55(1984c):1246-51.
- _____. Describing parent-child interaction during exploration: Situation definitions and negotiations. In *Genetic, Social, and General Psychology Monographs* 117(1991):79-89.
- Henderson, Bruce B., William R. Charlesworth, and Jan Gamradt. Children's exploratory behavior in a novel field setting. *Ethology and Social Biology* 3(1982):93-9.

- Henderson, Bruce B., and Shirley G. Moore. Children's responses to objects differing in novelty in relation to level of curiosity and adult behavior. *Child Development* 51(1980):457-65.
- Henderson, R.W., editor. *Parent-child interaction: Theory, research and prospects*. New York: Academic Press, 1981.
- Home rules. *Times educational supplement* 3559(September 14, 1984):28-9.
- Hughes, Martin. Early education and the community. *Scottish Educational Review* 18(May 1986):31-7.
- Hughes, Martin, Helen Carmichael, Gill Pinkerton, and Barbara Tizard. Recording children's conversations at home and at nursery school: A technique and some methodological considerations. *Journal of Child Psychology and Psychiatry* 20(1979):225-32.
- Hutt, Corinne. Specific and diversive exploration. In *Advances in child development and behavior*, vol. 5, edited by Hayne W. Reese and Lewis P. Lipsitt. New York: Academic Press, 1970.
- Immroth, Barbara, and Viki Ash-Geisler. Achieving school readiness. *Texas Library Journal* 70(1994):106-9.
- _____. *Achieving school readiness: Public libraries and national education goal no.1*. Chicago: American Library Association, 1995.
- Irwin, D. Michelle, and M. Margaret Bushnell. *Observational strategies for child study*. New York: Holt, Rinehart and Winston, 1980.
- James, Sharon L., and Martha A. Seebach. The pragmatic function of children's questions. *Journal of Speech and Hearing Research* 25(1982):2-11.
- Johns, Carole, and Richard C. Endsley. The effects of a maternal model on young children's tactual curiosity. *Journal of Genetic Psychology* 131(1977):21-8.
- Keislar, Evan R., and Jean Phinney. Young children's use of an information source in self-instruction. *AV Communication Review* 21(1973):177-90.
- Kirk, Jerome, and Marc L. Miller. *Reliability and validity in qualitative research*. Qualitative research methods series 1. Beverly Hills: Sage, 1986.
- Kniffel, Leonard. A standing ovation for the omission of libraries. *American Libraries* 22(1991):692.

- Knight, Douglas M., and E. Shepley Nourse, eds. *Libraries at large: Tradition, innovation, and the national interest*. New York: R.R. Bowker, 1969.
- Krashen, Stephen D. School libraries, public libraries and the NEAP reading scores. *School Library Media Quarterly* 23(Summer 1995):235-7.
- Krippendorff, Klaus. *Content analysis: An introduction to its methodology*. Newbury Park: Sage, 1980.
- Kuhlthau, Carol C. Information search process: A summary of research and implications for school library media programs. *School Library Media Quarterly* 18(1989):19-25.
- Kunesh, Linda, and Joanne Farley. Collaboration: The prerequisite for school readiness and success. *Emergency Librarian* 22(September/October 1994): 28, 30-1.
- Kupetz, Barbara N. A shared responsibility: Nurturing literacy in the very young. *School Library Journal* 39(July 1993):28-31.
- Kuzel, Anton J. Sampling in qualitative inquiry. In *Doing qualitative research*, edited by Benjamin F. Crabtree, and William L. Miller. Newbury Park, Calif.: Sage, 1992.
- Lange, Janet M. Public library users, nonusers, and type of library use. *Public Library Quarterly* 8(1988): 49-67.
- Lecompte, Margaret D., Wendy Millroy, and Judith Preissle, eds. *Handbook of qualitative research in education*. San Diego: Academic Press, 1992.
- Lincoln, Yvonne S., and Egon G. Guba. *Naturalistic inquiry*. Beverly Hills: Sage, 1985.
- Lofland, John, and Lyn H. Lofland. *Analyzing social settings: A guide to qualitative observation and analysis*. 3d ed. Belmont, Calif.: Wadsworth, 1995.
- Long, Harriet G. *Rich the treasure*. Chicago: American Library Association, 1953.
- Maduewesi, Ebele. Nigerian elementary children's interests and concerns. *Alberta Journal of Educational Research* 28(1982):204-11.
- Marchant, Maurice P., Marsha D. Broadway, Eileen Robinson, and Dorothy M. Shields. Research into learning resulting from quality school library media service. *School Library Journal* 30(April 1984):20-2.

- Marshall, Catherine, and Gretchen B. Rossman. *Designing qualitative research*. Newbury Park: Sage, 1989.
- Mason, Jana M., and Allen, JoBeth. A review of emergent literacy with implications for research and practice in reading. Center for the Study of Reading, Technical Report no. 379. ERIC document 273924, April 1986. Microfiche.
- Mathews, Virginia H. Countdown to a vote: The story behind the WHCLIS youth services resolution. *School Library Journal* 37(1991):34-9.
- Mathews, Virginia H., Judith G. Flum, and Karen A. Whitney. Kids need libraries: School and public libraries preparing the youth of today for the world of tomorrow. *Journal of Youth Services in Libraries* 3(1990): 197-207. (Also published in *Illinois Libraries* 2(1990):524-31, *School Library Journal* 36(1990):33-37 and, *School Library Media Quarterly* 18(1990):167-72.)
- McClure, Charles R., Amy Owen, Douglas L. Zweizig, Mary Jo Lynch, and Nancy A. Van House. *Planning and role setting for public libraries: A manual of options and procedures*. Chicago: American Library Association 1987.
- McKechnie, Lynne (E.F.). A review of selected research in public library services for children and young adults, 1980 - 1989. Graduate School of Library and Information Science, University of Western Ontario, London, 1991.
- Medinnus, Gene R. *Child study observation guide*. New York: John Wiley and Sons, 1976.
- Melamed, B.G. Reduction of medical fears: An information processing analysis. In *Learning theory approaches to psychiatry* edited by J. Boulougouris. New York: Wiley, 1982.
- Mellon, Constance Ann. *Naturalistic inquiry for library science: Methods and applications for research, evaluation, and teaching*. New York: Greenwood Press, 1990.
- Miles, Matthew B., and A. Michael Huberman. *Qualitative data analysis: An expanded sourcebook*. 2d ed. Thousand Oaks, Calif.: Sage, 1994.
- Moch, Matthias. Asking questions: An expression of epistemological curiosity in children. In *Curiosity, imagination and play: On the development of spontaneous cognitive and motivational processes*, edited by Dietmar Gorlitz and Joachim Wohlwill. Hillsdale, N.J.: Lawrence Erlbaum, 1987.

- Moore, Shirley G., and K. Naomi Bulbulian. The effects of contrasting styles of adult-child interaction on children's curiosity. *Developmental Psychology* 12(1976):171-2.
- Morrow, Lesley Mandel. Home and school correlates of early interest in literature. *Journal of Educational Research* 76(1983):221-30.
- _____. Young children's responses to one-to-one story readings in school settings. *Reading Research Quarterly* 23(1988):89-107.
- _____. The effect of small group story reading on children's questions and comments. In *Cognitive and social perspectives for literacy research and instruction*, edited by Sandra McCormick and Jerry Zutell, 38th Yearbook of the National Reading Conference. Chicago: National Reading Conference, 1989.
- National Commission on Excellence in Education. *A nation at risk: The imperative for educational reform*. Washington, D.C.: U.S. Department of Education, 1983.
- National Education Goals Committee. *National education goals report, 1992: Executive summary*. Washington, D.C.: National Education Goals Committee, 1993.
- Nelson-LeGall, Sharon, Ruth A. Gumerman, and Diane Scott-Jones. Instrumental help-seeking and every day problem-solving: A developmental perspective. In *Help-Seeking*, vol. 2 of *New directions in helping*, edited by Bella M. Depaulo, Jeffrey D. Fisher, and Arie Nadler. New York: Academic Press, 1983.
- Ninio, A. Joint book-reading as a multiple vocabulary acquisition device. *Developmental Psychology* 19(1983):445-51.
- Nunnally, Jum C., and L. Charles Lemond. Exploratory behavior and human development. In *Advances in child development and behavior*, vol. 8, edited by Hayne W. Reese. New York: Academic Press, 1973.
- Page, G. Terry, and J.B. Thomas. *International dictionary of education*. London: Kogan Page, 1977.
- Paris, Scott G., and David R. Cross. Ordinary learning: Pragmatic connections among children's beliefs, motives, and actions. In *Learning in children: Progress in cognitive development research*, edited by Jeffrey Bisanz, Gay L. Bisanz, and Robert Kail. Springer series in cognitive development. New York: Springer-Verlag, 1983.

- Patton, Michael Quinn. *Qualitative evaluation and research methods*. 2d ed. Newbury Park: Sage, 1990.
- Peterson, Lizette, and Susan M. Toler. An information seeking disposition in child surgery patients. *Health Psychology* 5(1986):343-58.
- Powell, Ronald R., Margaret T. Taylor, and David L. McMillen. Childhood socialization: Its effect on adult library use and adult reading. *Library Quarterly* 54(1984):245-64.
- Razzano, Barbara Will. Creating the library habit. *Library Journal* 110(February 15, 1984):111-4.
- Renninger, K. Ann, and Robert H. Wozniak. Effect of interest on attentional shift, recognition, and recall in young children. *Developmental Psychology* 21(1985):624-32.
- Richards, Barbara H. Discovery: Early learning for life. *Ohio Media Spectrum* 36(Fall 1984):5-8.
- Robbins, Claudia and Linnea C. Ehri. Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology* 86(1994):54-62.
- Rogers, Pat, and Barbara Herrin. Parent-child learning centers: An alternative approach to library programming for preschoolers. *Top of the News* 42(1986):343-55.
- Rogoff, Barbara. Adult assistance of children's learning. In *The contexts of school-based literacy*, edited by Taffy E. Raphael. New York: Random House, 1986.
- Rogoff, Barbara, Shari Ellis, and William Gardner. Adjustment of adult-child instruction according to child's age and task. *Developmental Psychology* 20(1984):193-9.
- Rogoff, Barbara, and William Gardner. Adult guidance of cognitive development. In *Everyday cognition: Its development in social context*, edited by Barbara Rogoff and Jean Lave. Cambridge, Mass.: Harvard University Press, 1984.
- Rollock, Barbara T. *Public library services for children*. Hamden, Conn.: Library Professional Publications, 1988.
- Rowntree, Derek. *A dictionary of education*. London: Harper and Row, 1981.

- Saxe, Geoffrey, Mary Gearhart, and Steven Gubermann. The social organization of early number development. In *Children's learning in the zone of proximal development*, edited by Barbara Rogoff, and James V. Wertsch, New directions for child development, vol. 23. San Francisco: Jossey-Bass, 1984.
- Saxe, Geoffrey B., Steven R. Guberman, and Mary Gearhart. *Social processes in early number development*. Monographs of the Society for Research in Child Development, vol. 52, no. 2. Chicago: Society for Research in Child Development, 1987.
- Saxe, Robert M., and Gary E. Stollak. Curiosity and the parent-child relationship. *Child Development* 42(1971):373-84.
- Schaefer, Earl S. Parents as educators: Evidence from cross-sectional, longitudinal, and intervention research. In *The young child: Reviews of research*, vol. 2, edited by Willard W. Hartup. Washington, D.C.: National Association for the Education of Young Children, 1972.
- Schontz, Marilyn Louise. Selected research related to children's and young adult services in public libraries. *Top of the News* 38(1982):125-42.
- Seaver, Alice R. *Library media skills: Strategies for instructing primary students*. Littleton, Colo.: Libraries Unlimited, 1984.
- Shafritz, Jay M., Richard P. Koeppe, and Elizabeth W. Soper. *The facts on file dictionary of education*. New York: Facts on File, 1988.
- Shapiro, Jon, and Ray Doiron. Literacy environments: Bridging the gap between home and school. *Childhood Education* 3(1987):262-9.
- Sharpe, L. Participant verification procedures. In *Educational research, methodology and measurement: An international handbook*, edited by John P. Keeves. Oxford: Pergamon Press, 1988.
- Singleton, Royce, Bruce C. Straits, Margaret M. Straits, and Ronald J. McAllister. *Approaches to social research*. New York: Oxford University Press, 1988.
- Smardo, Frances A. A comparison of the impact of three methods of storyhour presentation on children's listening skills. *Public Library Quarterly* 4(1983):33-42.
- Snow, C. Literacy and language: Relationships during the preschool years. *Harvard Educational Review* 53(1983):165-89.

- Snow, C. and B. Goldfield. Building stories: The emergence of information structure from conversation and narrative. In *Analyzing discourse: Text and talk*, edited by Deborah Tannen. Washington, D.C.: Georgetown University Press, 1981.
- _____. Turn the page please: Situation specific language acquisition. *Journal of Child Language* 10(1983):551-70.
- Snow, Catherine E. and Anat Ninio. The contracts of literacy: What children learn from learning to read books. In *Emergent literacy: Writing and reading*, edited by William H. Teale and Elizabeth Sulzby. Norwood, N.J.: Ablex, 1986.
- Sobol, Thomas. Libraries, America 2000 and education reform. *Bookmark* 49(1991):255-61.
- Social Sciences and Humanities Research Council of Canada. Annex H. Ethics guidelines - research with human subjects. In *SSHRC fellowships: Guide for applicants*. Ottawa, Ont.: Social Science and Research Council of Canada, 1992.
- Sowden, S., and John P. Keeves. Analysis of evidence in humanistic studies. In *Educational research, methodology, and measurement: An international handbook*, edited by John P. Keeves. Oxford: Pergamon Press, 1988.
- Spradley, James P. *Participant observation*. New York: Holt, Rinehart and Winston, 1980.
- Statistical report for the month of December 1994 (Study Library).
- Statistics Canada. *Educational attainment and school attendance: The nation. 91 Census*, Catalogue 93-328. Ottawa: Minister of Industry, Science and Technology, 1993.
- _____. *Families: Number, type and structure: The nation. 91 Census*, Catalogue 93-312. Ottawa: Minister of Industry, Science and Technology, 1992.
- _____. *Labour force activity: The nation. 91 Census*, Catalogue 93-324. Ottawa: Minister of Industry, Science and Technology, 1993.
- _____. *Occupation: The nation. 91 Census*, Catalogue 93-327. Ottawa: Minister of Industry, Science and Technology, 1993.
- _____. *Profile of census divisions and subdivisions in Ontario - part A. 91 Census*, Catalogue 95-337. Ottawa: Minister of Industry, Science and Technology, 1992.

- _____. *Profile of census tracts in London, Sarnia-Clearwater and Windsor - Part B (20% sample)*. 91 Census, Catalogue 95-347. Ottawa: Ministry of Industry, Science and Technology, 1994.
- _____. *Selected income statistics: The nation*. 91 Census, Catalogue 93-331. Ottawa: Minister of Industry, Science and Technology, 1993.
- _____. *1991 Census dictionary*, Catalogue 92-301E. Ottawa: Minister of industry, Science and Technology, 1992.
- Strauss, Anselm, and Juliet Corbin. *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage, 1990.
- Sulzby, Elizabeth and William Teale. Emergent literacy. In *Handbook of reading research*, edited by Rebecca Barr, Michael L. Kamil, Peter B. Mosenthal, and P. David Pearson, vol. 2. New York: Longman, 1991.
- Taylor, Steven, and Robert Bogdan. *Introduction to qualitative research methods: The search for meanings*. 2d ed. New York: John Wiley, 1984.
- Teale, William H. Home background and young children's literacy development. In *Emergent literacy: Writing and reading*, edited by William H. Teale and Elizabeth Sulzby. Norwood, N.J.: Ablex, 1986.
- _____. Reading to young children: Its significance for literacy development. In *Awakening to literacy: The University of Victoria symposium on children's response to a literate environment: Literacy before school*, edited by Hillel Goelman, Antoinette A. Oberg, and Frank Smith. Portsmouth, N.H.: Heineman Educational Books, 1982.
- Teale, William H., and Elizabeth Sulzby. Emergent literacy and a perspective for examining how young children become writers and readers. In *Emergent literacy: Writing and reading*, edited by William H. Teale and Elizabeth Sulzby. Norwood, N.J.: Ablex, 1986.
- Thomas, Dene Kay. Why questions and why answers: Patterns and purposes. *Language Arts* 65(1988):552-6.
- Thomas, R. Murray. *Comparing theories of child development*. 3d ed. Belmont, Calif.: Wadsworth, 1992.
- _____. Learning processes. In *The encyclopedia of human development and education: Theory research and studies*, edited by R. Thomas Murray. Oxford: Pergamon Press, 1990.

- Tizard, Barbara, Helen Carmichael, Martin Hughes, and Gill Pinkerton. Four year olds talking to mothers and teachers. In *Language and language disorders in childhood*, edited by L.A. Hersov, and M. Berger. A book supplement to the "Journal of Child Psychology and Psychiatry," no. 2. Oxford: Pergamon Press, 1980.
- Tizard, Barbara, and Martin Hughes. *Young children learning*. Cambridge, Mass.: Harvard University Press, 1984.
- Tizard, Barbara, Martin Hughes, Helen Carmichael, and Gill Pinkerton. Children's questions and adults' answers. *Journal of Child Psychology and Psychiatry* 24(1983):269-81.
- Tizard, Barbara, Martin Hughes, Gill Pinkerton, and Helen Carmichael. Adults' cognitive demands at home and at nursery school. *Journal of Child Psychology and Psychiatry* 23(1982):105-16.
- Touliatos, John, and Norma H. Compton. *Approaches to child study*. Minneapolis: Burgess, 1983.
- Tymchuk, Alexander J. Assent processes. In *Social research on children and adolescents*, edited by Barbara Stanley, and Joan E. Sieber. Newbury Park: Sage, 1992.
- University of Western Ontario. Standing Committee on Non-medical Research Involving Human Subjects. Instructions for preparing letters of information and consent forms. London, Ontario, n.d. Photocopy.
- Van House, Nancy A., and Thomas A. Childers. The use of public library roles for effectiveness evaluation. *LISR* 16(1994):41-58.
- Vasta, Ross, Marshall M. Haith, and Scott A. Miller. Some common sex differences. In *Child psychology: The modern science*, 2d ed. New York: John Wiley and Sons, 1995.
- Vygotsky, Lev. *Mind in society: The development of higher psychological processes*. Edited by Michael Cole, Vera John-Steiner, Sylvia Scribner and Ellen Souberman. Cambridge, Mass.: Harvard University Press, 1978.
- Walter, Virginia A. The information needs of children. In *Advances in librarianship*, vol. 18, edited by Irene P. Godden. San Diego: Academic Press, 1994.

- Wanting, Birgit. Some results from an investigation in Danish libraries: How do children ask questions about books in children's libraries? *Scandinavian Public Library Quarterly* 19(1986):96-9.
- Wells, Gordon. Language and learning in the early years. *Early Child Development and Care* 11(1983):69-77.
- _____. Language, learning and the curriculum. *Early Child Development and Care* 12(1983):277-302.
- _____. *Language, learning and education: Selected papers from the Bristol Study: "Language at home and at school,"* 2d ed. Philadelphia: NFER-Nelson, 1985.
- _____. *The meaning makers: Children learning language and using language to learn.* Portsmouth, N.H.: Heinemann, 1986.
- _____. Talking with children: the complementary roles of parents and teachers. *English in Education* 12(1978):15-36,38.
- Wells, Gordon, and Jan Wells. Learning to talk and talking to learn. *Theory into Practice* 13(1984):190-7.
- Wertsch, J., G.D. McNamee, J. McLane, and N.A. Budwig. The adult-child dyad as a problem-solving system. *Child Development* 51(1980):1215-21.
- Winter, J. Alan, and Eugene C. Goldfield. Caregiver-child interaction in the development of self: The contributions of Vygotsky, Bruner, and Kaye to Mead's theory. *Symbolic Interaction* 14(1991):433-47.
- Wohlwill, J. F. A conceptual analysis of exploratory behavior: The specific-diversive distinction revisited. In *Advances in intrinsic motivation and aesthetics*, edited by H. Day. New York: Plenum, 1981.
- Yarrow, L.J. Interviewing children. In *Handbook of research methods in child development*, edited by P.H. Mussen. New York: John Wiley, 1960.
- Year of the young reader concludes with symposium on learning. *Library of Congress Information Bulletin* 49(1990):126.
- Zimmerman, Barry J., and Earl O. Pike. Effects of modeling and reinforcement on the acquisition and generalization of question-asking behavior. *Child Development* 43(1972):892-907.

Zimmerman, Don H., and D. Lawrence Wieder. The diary: Diary - interview method. *Urban Life* 5(1977):479-98.

Zweizig, Douglas. The children's services story. *Public libraries* 31(1993):26-8.

Zweizig, Douglas, and Brenda Dervin. "Public library use, users, uses: Advances in the knowledge of the characteristics and needs of adult clientele of American public libraries." In *Advances in librarianship*, vol. 7. New York: Academic Press, 1977.

APPENDIX I - STATISTICS CANADA DEFINITIONS

Census family: "Refers to a now-married couple (with or without never-married sons and/or daughters of either or both spouses), a couple living common-law (again with or without never-married sons and/or daughters of either or both partners), or a lone parent of any marital status, with at least one never-married son or daughter living in the same dwelling" (Statistics Canada. Catalogue No. 92-301 E, 119).

Husband and wife family: "Refers to a family including two adults of opposite sex who are legally married to each other and living in the same dwelling" (ibid., 122).

Common-law family: "Refers to a family including two adult people of opposite sex who live together as husband and wife but who are not legally married to each other" (ibid., 22).

Lone-parent family: "Refers to a family with a mother or father, with no spouse or common-law partner present, living in a dwelling with one or more never married sons and/or daughters" (ibid., 122).

Never-married sons and/or daughters: Refers to blood, step or adopted sons and daughters who have never married (regardless of age) and are living in the same dwelling as their parent(s) (ibid., 122).

Income: total income: "Refers to the total money income received from the following sources during the calendar year 1990 by persons 15 years of age and older:

Total wages and salaries

Net income from unincorporated non-farm business and/or professional practice

Net farm self-employment income

Family allowances

Federal child tax credits

Old Age Security pension and Guaranteed Income Supplement

Benefits from Canada or Quebec Pension Plan/ Benefits from Unemployment Insurance

Other income from government sources

Dividends from interest on bonds, deposits, savings certificates and other investment income

Retirement pensions, superannuation and annuities

Other money income"

(ibid., 48-9).

Dwelling: "Refers to two a set of living quarters in which a person or group of persons reside or could reside" (ibid., 155).

Structural type of dwelling: "Refers to the structural characteristics and/or dwelling configuration, that is, whether the dwelling is a detached single house, apartment..., a row house, a mobile home, etc." (ibid., 164)

Definitions for specific types of dwelling structures may also be found in the *1991 Census dictionary* (ibid., 164-5).

Dwelling tenure: "Refers to whether some member of the household owns or rents the dwelling, or whether the dwelling is band housing (on an Indian reserve or settlement)" (ibid., 148).

Labour: labour force activity: "Refers to the labour market activity of the working age population who, in the week prior to [the 1991 Census data collection] were employed or unemployed. The remainder of the working age population is classified as not in the labour force" (ibid., 62).

Labour: full-time or part-time weeks worked in 1990: "Refers to the persons who worked in 1990. These persons were asked to report whether the weeks they worked in 1990 were full weeks (30 hours or more per week) of work or not. Persons with a part-time job for part of the year and a full-time job for another part of the year were to report the information for the job at which they worked the most weeks" (ibid., 58).

Labour: Occupation: "Refers to the type of work persons were doing..as determined by their kind of work and the most important duties of their job...Persons with two or more jobs were to report the information for the job at which they worked the most hours" (ibid., 68).

APPENDIX II.1 - ADVERTISING MATERIALS: SAMPLE FLYER AND POSTER (reduced to 77%)

SUBJECTS NEEDED FOR A STUDY OF USE OF THE PUBLIC LIBRARY BY PRESCHOOL CHILDREN

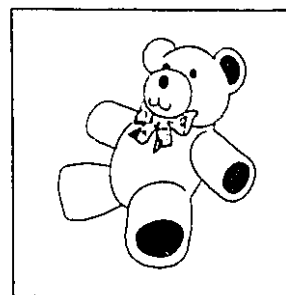
How Many Miles To Babylon? - The Use of Public Libraries By Preschool Children

Who?

- Thirty girls within three months of their fourth birthday and their mothers.

What?

- The children will be observed and tape recorded during one or two of their regular trips to local public libraries.
- Mothers will be asked to keep brief notes for one week after the library trip about the use of library materials and any incidents relating to the library. They will also be asked to participate in a short follow up interview.



When?

- Library visits and interviews will take place during the winter of 1994.
- They will be scheduled at times convenient to participating families.

Where?

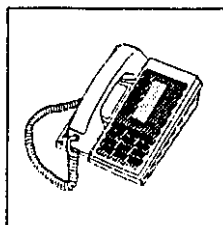
- The Central Children's Library and Eastwood, Jalna and Sherwood Forest branch libraries are the sites that have been chosen for library visits. Both regular and occasional users of these sites may participate.
- Mothers may choose to be interviewed either at the library or in their homes.

Why?

- It is hoped that this study will give us a better understanding of how preschoolers use the public library.

Other Information

- There are no known psychological or physical risks involved.
- Participation is completely voluntary.
- The identity of participants will be kept strictly confidential.
- There is no remuneration for taking part in this study.
- After the study mothers will be invited to a brief presentation about the findings and children will be invited to a library theme story hour.
- The researcher is a PhD student at the Graduate School of Library and Information Science at the University of Western Ontario. Prior to this she was a children's librarian for almost 20 years.



FOR FURTHER INFORMATION OR TO VOLUNTEER TO PARTICIPATE PLEASE CALL
Lynne McKechnie (PhD Student)
Graduate School of Library and Information Science
University of Western Ontario
661-3542 Extension 8501 (University)
268-3892 (Home)

**APPENDIX II.2 - ADVERTISING MATERIALS: NOTICE FOR COMMUNITY,
UNIVERSITY AND OTHER NEWSPAPERS AND NEWSLETTERS**

**SUBJECTS REQUIRED FOR A STUDY OF PUBLIC LIBRARY USE BY
PRESCHOOL CHILDREN**

Thirty girls within three to six months of their fourth birthday and their mothers are needed for a study, "How Many Miles To Babylon? - The Use of Public Libraries By Preschool Children."

Participating children will be observed and tape recorded during one or two of their regular trips to local public libraries. Mothers will be asked to keep brief notes about the use of library materials and any incidents related to the library during the week following the visit(s) and to participate in a follow-up interview. Library visits and interviews will be arranged at times convenient to the participants and are expected to occur in the winter of 1994.

There are no known psychological or physical risks associated with this study. The identity of participants will be held strictly confidential and will not be revealed to others or in reports coming out of the research.

The researcher is a PhD student at the Graduate School of Library and Information Science at the University of Western Ontario. Prior to this she was a children's librarian for almost twenty years.

Participation is completely voluntary. There is no remuneration for taking part. At the end of the study, mothers will be invited to attend a short presentation about the findings. Children will be invited to a special library theme story hour.

For further information or to volunteer as a subject please call:

Lynne McKechnie
PhD Student
Graduate School of Library
and Information Science
University of Western Ontario
661-3542, extension 8501 (university)
268-3892 (home).

APPENDIX III - INITIAL CONTACT SUMMARY FORM

INITIAL CONTACT SUMMARY FORM

1. Initial Contact

Date _____

Name _____ Phone Number _____

Description of how the initial contact was made and a
summary of the content of the conversation.

2. Follow Up

Date _____

2.1 SUBJECT SCREENING

2.11 Mother

Name _____ Phone _____

Address _____

2.12 Child

Name _____ Sex _____

Date of Birth _____ Age _____

Mother tongue _____

Father or step father living at home? _____

Total number of children living at home _____

During the last six months, how frequently has the child used the public library and which libraries did the child use?

2.13

Meet sample criteria? _____

Interested in participating? _____

2.2 APPOINTMENT FOR INFORMATION SHARING AND ORIENTATION

2.3 SUMMARY OF QUESTIONS ASKED, OTHER INFORMATION SHARED, ETC., DURING THIS CONTACT

3. Codes Assigned

Child _____

Mother _____

Site _____

APPENDIX IV - INSTRUCTIONS FOR KEEPING THE DIARY

Instructions For Keeping the Diary

1. Please jot down a brief note every time your daughter uses materials borrowed from the library, talks about anything she experienced at the library, plays library related games, or does anything else that is in any way related to the library and the library visit.
2. Record the date and time of each incident described.
3. Record as much detail (e.g. titles of books used, near verbatim reporting of conversations) as you can.
4. You may record incidents that are related to you by others so long as they are clearly identified as such in the diary. However, do NOT specifically ask others to look for library related behaviour. Simply record incidents that are spontaneously reported to you.
5. Try to make entries in the diary at least once per day so that you will be better able to remember and record everything that happened.
6. Bring the completed diary to our scheduled interview as we will use it to guide some of the interview questions.
7. If you have any questions at any time during this process, please call me. I will check in with you once during the week.

Lynne McKechnie
PhD Student
Graduate School of Library and
Information Science
University of Western Ontario
679-2111 Ext. 8516 (university)
268-3892 (home)

APPENDIX V - FOLLOW-UP INTERVIEW GUIDE

How Many Miles To Babylon? - The Use of Public Libraries By Preschool Children

FOLLOW-UP INTERVIEW GUIDE

A. Observer Effect Questions

I would like to take a few minutes to talk to you about how the process of doing the study might have affected its results.

- 1.1 Can you tell me if your library visit during the study was different from others you have made? How? How much different?
- 1.2 I've prepared a brief summary of your library visit. Will you read it and tell me if it makes sense to you? Would you have described this visit differently? If so, how?

B. Specific Questions Arising From the Visit

Individual questions are developed for each subject. The questions are included in the ethnographic record.

C. How the Diary Was Kept Questions

2. It would be really helpful to me if I had some idea how thorough you were in keeping the diary. I don't care if you were unable to record everything. I'm interested in what you were able to do. Suggested probes if needed:
 - So, would you say you were able to remember and record all incidents you observed?
 - Can you tell me how you went about keeping the diary?
 - Can you tell me about any problems you had keeping the diary?

D. Diary Incident Questions

3. Expansion Questions
 - 3.1 Who - Can you tell me exactly who participated in [the event]?
 - 3.2 What - Can you tell me in as much detail as possible what happened?

3.3 When - Can you remember when [the event] happened and how long it lasted?

3.4 Where - Where did [the event] happen?

3.5 How - Can you tell me how this happened?

4. Analytic Questions

4.1 Typicality - Would it be usual for your daughter to do this sort of thing?

4.2 Connections with other events - Do you see [the event] as related to other things happening in your child's life?

4.3 Context - Were there any special circumstances that you see as having led up to [the event]? If so, can you tell me about them?

5. Specific questions arising from the diary

E. Library Materials Borrowed Questions

Check to see if all the materials borrowed were used. If not, ask why? If yes, is this typical?

F. Socio-Economic Demographic Questionnaire

Administer the questionnaire but do not tape record this part of the session.

**APPENDIX VI - BASIC SOCIO-ECONOMIC AND DEMOGRAPHIC DATA
QUESTIONNAIRE**

BASIC SOCIO-ECONOMIC AND DEMOGRAPHIC DATA QUESTIONNAIRE

Identifying Codes

Child _____ **Mother** _____ **Site** _____

1. Child

1.1 Date of birth _____

1.2 Mother tongue _____

1.3 School(s) attending

None _____ OR

Name _____

Type

Junior Kindergarten _____

Nursery/Preschool _____

Other (specify) _____

When (time and days/week) _____

2. Family

2.1 Family structure

Now married _____ Common-law _____

2.2 Other children at home

Birth date _____ Sex _____

2.3 Total Family Income _____

3. **Mother**

3.1 Occupation _____

3.2 Hours worked per week _____

3.3 Highest level of education completed

3.4 Mother tongue _____

4. **Father**

4.1 Occupation _____

4.2 Hours worked per week _____

4.3 Highest level of education completed

4.4 Mother tongue _____

5. **Dwelling**

5.1 Type _____

5.2 Own _____ Rent _____

**APPENDIX VII.1 - INFORMED CONSENT INSTRUMENTS: LETTER OF
INFORMATION FOR PARTICIPANTS**

**How Many Miles To Babylon? -
The Use of Public Libraries By Preschool Children
AN INFORMATION SHEET FOR PROSPECTIVE PARTICIPANTS**

PURPOSE: The purpose of this study is to learn how preschool children use public libraries.

PROCEDURES: Four year old girls will be tape-recorded and observed during one or two of their regular trips to local public libraries with their mothers. Before the library visits, the researcher will meet with the mother and child to explain the research project and the procedures involved and to seek their consent to participate. Mothers will be asked to keep brief notes during the week following the library visit about their child's use of library materials and any incidents which occur that are related to the library. Mothers will then be asked to participate in a follow up interview which will be tape recorded.

TIME REQUIRED: It is anticipated that these activities (one meeting, one or two library visits, note taking and the follow up interview) will take approximately one hour each for a total of four hours (and no more than a maximum of eight hours) over a four week period.

RISKS AND BENEFITS: There are no known physical or psychological risks associated with this study for either the children or the mothers. The results of this study may contribute to our knowledge about library use by preschoolers. Mothers will be invited to an information session where the results will be presented. The children will be invited to a special library theme story hour after the study is completed.

DISCOMFORT AND INCONVENIENCE: Children will be asked to wear a special shirt over their own clothing which will house a wireless microphone and recorder in padded pockets. It is anticipated that this will cause them little or no discomfort. Meetings, interviews and library visits will be scheduled at times that are convenient for participating families.

VOLUNTARY PARTICIPATION: Participation in this study is completely voluntary for both adults and children. Parental permission will be sought before children are asked whether

or not they are willing to participate. Subjects may withdraw from the study, or any part of it, at any time for any reason.

CONFIDENTIALITY: The identity of all participants will be kept strictly confidential. Pseudonyms and codes will be used in reports and publications resulting from the research. Personal names will not be used, or will be removed from or replaced in all audio tapes, transcripts and notes. These anonymized records will be kept by the researcher for further educational and research use.

FURTHER QUERIES: If you have any further questions please call

Lynne McKechnie (PhD Student)
Graduate School of Library and Information Science
University of Western Ontario
661-3542 Ext.8501 (University)
268-3892 (Home)

**APPENDIX VII.2 - INFORMED CONSENT INSTRUMENTS: PARTICIPANT
CONSENT FORM**

**How Many Miles to Babylon? -
The Use of Public Libraries By Preschool Children
PARTICIPANT CONSENT FORM**

PARTICIPANT'S NAME _____

As a participant in the study, How Many Miles to Babylon?, I have read the letter of information, had my questions answered to my satisfaction, and understand the general nature, purpose and procedures of the study as explained to me by the researcher.

I understand that my permission is required for my child to participate but also, that my child must be asked for and give her own verbal consent to take part.

I understand that data resulting from my or my child's participation in this study will not identify me or my child in any way. I also understand that I or my child may withdraw from the study or any part of it at any time for any reason.

I hereby give my permission for:

- a. my child to participate in this study and for the researcher to seek the child's oral consent to participate;
- b. the procedures associated with various parts of the study: an initial meeting for detailed orientation and the collection of basic demographic data; tape-recording and observation of one or two library visits; written note making for one week; tape-recording of a follow-up interview, all activities to take approximately four but no more than eight hours in total;
- c. educational and research use of tape-recordings, transcripts made from the tape-recordings, field notes based on observations and notes kept after the library visits.

Participant's signature

Researcher's signature

Date

CHILD'S NAME _____

The research study was explained to _____ in
the presence of her mother and she orally agreed to take
part.

Mother's signature

Researcher's signature

Date

APPENDIX IX.1 - CODE MANUALS: OBSERVER EFFECT CODE MANUAL

CODE BOOK - OBSERVER EFFECT

OBSERVER EFFECT: Observer effect is said to occur when the methodology used in the research study affects its results. Specifically in this study, observer effect occurs when the behaviour of the **child, mother, sibling(s), library staff or others** present in the library at the time of data collection is altered or different simply because the study is being done.

Categories of observer effect include:

1. **Equipment**
Attending to the study equipment (shirt, recorder). Examples of this include talking about the equipment, asking questions about the equipment, handling the equipment and removing the study shirt.
2. **Researcher**
Attending to the researcher. Examples of this include talking about the researcher, asking where the researcher is, approaching the researcher and talking to the researcher.
3. **Behaviour**
Altered or unusual behaviour. Examples of this include: 3.1 child - signs of discomfort such as staying close to the mother, crying/whining; unusual behaviour such as being overly quiet or overly noisy.
3.2 mother - encouraging "performances" or unusually "good" behaviour by the child to impress the researcher such as asking the child to recite the alphabet or recognize colours; if a sibling is present attending more to the child in the study than the sibling (without a logical reason such as in the case where a sibling is an infant who sleeps during the visit); avoiding interaction with the child so as not to be tape-recorded; staying longer at the library than usual.
NOTE: Many mothers naturally encourage many behaviours like alphabet and colour identification during interaction with their children. The following types of evidence are helpful to distinguish naturally occurring incidents of this behaviour from those caused by observer effect: ready cooperation on the part of the child as evidenced by their immediately given agreement (through talk or action) to participate; confirmation by the mother in the follow-up interview that she normally does these things with her child (especially if she is able to provide another recent example); seeming familiarity with the activity by the child as evidenced by their ability to participate easily (seem to know what is expected and are able to respond or try to respond easily); initiation of the activity (or others like it) by the child.
3.3 siblings - avoiding interaction (conversation, play, etc.) with the child

being studied; signs of discomfort.

3.4 library staff - avoiding contact with the child and the child's family by staying away from public service areas (for example staying in the work room).

3.5 others - reading the alerting signs posted throughout the library and then either avoiding interaction with the child being studied as indicated by behaviours such as leaving the library, moving away from where the child is, or actively seeking more interaction with the child as indicated by behaviours such as closely following the child around the library or talking to the child all the time.

4. **Other**

Other actions or talk that seem to be unusual.

Observer effect was found to be either persistent or not persistent.

i. **Persistent Observer Effect:** Continues over a substantial period of time. For example, for more than a minute (estimated from length of the transcript or field note entry) or for more than ten conversation turns with another. Is not resolved by distraction either by another or by self.

ii. **Not Persistent Observer Effect:** Ends quickly. For example, does not last for more than a minute (estimated from length of the transcript or field note entry) or lasts less than ten turns of conversation with another. Observer effect is also not persistent when the individual involved is easily distracted by another person or moves on independently to another more usual activity. Examples include a mother successfully distracting the child from handling the recorder by asking her not to or directing her attention to another activity such as a puzzle building, book selection or story sharing which the child then begins to do; the researcher telling a child she can not talk to her now because she is working and convincing the child to return to her library visit.

Counter examples: include incidents of behaviour that suggest that individuals are not aware the study is taking place. Examples include: a child asking during or after the visit when they are going to do the study; a mother, staff member or other library user disciplining a study subject or interacting with her in another negative way that they would be unlikely to want the researcher or others to observe.

Participant / Staff Verification

At the end of the library visit the researcher usually asked both the child's mother and the library staff if the visit seemed to be like other visits that the child made to the library. Mothers were asked this question again in the follow up interview. Responses to this typicality question are coded according to the source of the information:

Mother: the mother provides the information.

Staff: one or more library staff members provide the information.

Responses are also coded according to the nature of the answer as follows:

Yes: The informant indicates that the visit was ordinary, usual or typical and does not provide any information about one or more ways that it differed from other visits

Yes - Qualified: The informant indicates that the visit was ordinary, typical or usual but describes one or more ways that it was different from other visits. Examples might include a mother indicating that the visit was a bit shorter than usual because the family had errands to do or that the child usually attended a story time but did not on this visit because it happened between sessions of story times.

Don't Know: The informant indicates that they do not know whether the visit was ordinary, usual or typical. For example, library staff might indicate that they do not know or recall the child well enough to answer this question.

No: The informant indicates that the visit was not ordinary, typical or usual and may (but does not have to) indicate why.

Missing value: There is no evidence in the field notes or interview transcript that the question was asked and answered.

NOTE: While it might be possible to code this data at a greater level of detail, for example to analyze the types of situations that give rise to observer effect in the child (such as the desire to interact socially with the researcher or curiosity about the equipment) or the strategies mothers use to help overcome observer effect (such as physically restraining the child or distracting to another activity), I chose not to do this. Rather coded segments will be reviewed and this type of explanatory analysis will be included in the reporting of the results.

Coder Instructions

1. Carefully read the Visit Transcript for each case. Search for and mark incidents of observer effect. Code for the following characteristics:
 - a. Observer effect
 - b. Who is affected -
 - Child
 - Mother
 - Sibling
 - Library staff
 - Others
 - c. Type of observer effect -
 - Equipment
 - Researcher
 - Behaviour

Other (please describe in a few words)

d. Nature of observer effect -

Persistent

Not Persistent

e. Counter examples

2. Carefully read the Visit field notes for each case.
 - a. Search for and code incidents and counter examples of observer effect as above for the Visit transcripts.
 - b. In addition note on the Visit transcript if the field notes confirm / don't confirm an incident of observer effect noted in the Visit transcript.
 - c. Code the final (after the visit) portion of the field notes as follows.

Typical visit?

Mother

Staff

Yes

Yes

Yes - qualified

Yes - qualified

Don't Know

Don't Know

No

No

Missing value

Missing value

3. Carefully read the following sections of the Interview Transcript:
 - Observer Effect Questions
 - Specific Questions Arising from the Visit
 - a. Code for the "Typical visit" question as follows:
 - Yes
 - Yes - qualified
 - Don't Know
 - No
 - Missing value
 - b. Code for the "Does the visit summary match?" question as follows:
 - Yes
 - Yes - qualified
 - No
 - Missing value

c. Search for evidence in the "Specific Questions Arising from the Visit" that confirms or disconfirms incidents of observer effect in the visit transcript. For example, a mother might indicate that she felt that her child was uncomfortable wearing the shirt which would confirm an incident of observer effect; mothers may indicate that they routinely ask their child to identify letters while they are sharing a story which would disconfirm an example of observer effect related to unusual behaviour on the part of the mother.

APPENDIX IX.2 - CODE MANUALS: LIBRARY VISIT CODE MANUAL

CODE BOOK - LIBRARY VISITS

Research Question:

What happens during an ordinary library visit?
What does the child do?

General Considerations:

1. An activity includes actions that lead up to or follow directly from it. For example, talking about checking the library catalogue and walking over to it counts as part of a catalogue search incident. Similarly, talking about a library program as one walks out of the room where the program was held would be included as part of an incident of participating in a program. However, just talking about doing something without actually doing it does not count as an incident of that type of activity. This exception does not apply to activities like the selection of materials where talk is often an intrinsic part of the particular activity.
2. In order to count two separate incidents of a type of activity, the following should occur:
 - incidents should be divided by another, clearly different type of activity. For example, if a child plays with a puzzle and then immediately plays with a truck, this would be counted as one incident of "Play." However, if a child plays with a puzzle, then looks through a book and then plays with a truck, two incidents of play would be counted.
 - in the case of "Reading" and "Perusing" books/stories, each story/book read or perused counts as a single incident of this type of activity.

RETURN LIBRARY MATERIALS:

Return library materials to the circulation desk.

CHECK OUT LIBRARY MATERIALS:

Check out library materials to borrow for use outside the library.

SELECT LIBRARY MATERIALS:

Select library materials to be used in the library and/or to be borrowed for use outside the library. This includes activities like browsing shelves, searching for particular known items or talking about what might or will be selected.

E.g. Mother: Do you want any books on dogs today?

Child: Yes, I do want some books on dogs today.

PLAY:

Play with physical items such as toys, games and puzzles. Play with another person is counted as social interaction. However if play with another person involves play with physical objects, it would be identified as an incident of both "Play" and "Social Interaction."

INTERACT SOCIALLY WITH OTHERS:

Active, reciprocal talk or play with another person who is not a member of the child's family or a library staff member. This includes other children and adults. For social interaction to have occurred the child must respond to a communicative action on the part of another, or another person must respond to a communicative action of the child. For example, a conversation or joint play between the child and another person would count as social interaction. Social interaction does not occur if the child simply watches another or is watched by another person.

INTERACT WITH STAFF:

Social interaction (as described above) in which the child interacts with a library staff member. This includes incidents directly related to the staff member's usual duties, such as checking out library materials, as well as informal interchanges such as greetings and conversations about non-library topics.

OBSERVE OTHERS:

The child watches the activity of one or more other children and/or adults who are not family or staff members.

USE SUPPORT FACILITIES:

Includes use of washrooms, water fountains, photocopiers and similar support facilities.

ASK REFERENCE QUESTIONS:

The child seeks assistance from another person (including library staff, mothers, other adults or other children) to use the library's resources. This includes directional queries (e.g. Where are your picture books?), holdings queries (e.g. Do you have *Curious George*), bibliographic instruction (e.g. How do I use the OPAC?) and information questions (e.g. Do you have any information about horses?).

ASK READER'S ADVISORY QUESTIONS:

The child seeks assistance from another person to find a good book to read. (E.g. Can you help me find a good book to read?)

SEARCH THE CATALOGUE;

The child independently or with another person, searches the library's catalogue.

PARTICIPATE IN A PROGRAM:

The child participates in an structured activity involving a library staff member such as a story hour or craft program.

1. **Formal** programs are those which are scheduled for a specific time and which may require registration.
2. **Informal** programs are activities which occur on an unscheduled basis but still require staff involvement. Examples include participating in an impromptu story time or doing a craft activity with materials specially supplied by a staff member.

Activities requiring no staff involvement, e.g. playing with a chess set available on a table in the library, making a craft with materials provided in a box on a table in the library, are counted as play.

VIEW AN EXHIBIT/DISPLAY:

The child looks at an exhibit or display which may include things like artwork, natural items (e.g. aquarium with fish, shells), library materials or other things that are not meant to be borrowed. A thematic display which includes and is designed to encourage the use of library materials that may be borrowed does not count as an exhibit.

READ A STORY/BOOK:

The child reads or listens to another (mother, other adult, child able to read) read a story. This includes verbally decoding, summarizing or retelling some of the text within the book. A substantial portion or all of the book should have been read. Children who are not yet able to actually decode text, are considered to be "reading" the text if they actually mimic reading through behaviours such as telling the story aloud, holding the book up so another can see it during telling or using story reading conventions like identifying the title and saying "the end."

PERUSE A STORY/BOOK:

The child looks through part or all of a book either independently or with another child or adult. No systematic verbal decoding, description or summarization of the text occurs. This includes activities like looking through a book by turning the pages, pointing to and/or talking about some of the illustrations. A substantial portion of the book should have been perused. Scanning a small portion, for example the cover and a page or two of a book, during selection of materials for borrowing or reading in the library does not count as perusal. However, if during selection a child were to sit on the floor and carefully look through all or most of a book this would count as an incident of both "Perusal" and "Selection."

LISTEN TO AN AUDIO-RECORDING/VIEW A VIDEO-RECORDING

The child listens to all or some of an audio-recording or views all or some of a video-recording.

APPENDIX IX.3 - CODE MANUALS: HOME USE CODE MANUAL

CODE BOOK - HOME USE

RESEARCH QUESTIONS: How does the child use library materials outside the library? What other kinds of activities, related to the child's use of the library, occur outside the library? During the week following the study visit, what kinds of activities did the child engage in related to the research study?

Data Sources: Diary transcripts; Interview transcripts - Diary incident questions. Code the diary transcripts first. Then read the diary incident questions portion of the interview transcripts. Generally the interview transcripts will provide more information about many of the diary incidents which help to clarify and expand on the mother's diary entries. Occasionally mothers remembered more activities during the course of the interview. Code these incidents on the interview transcripts.

MATERIALS

This broad category refers to the use of materials borrowed from the library's collections, both print and nonprint.

1. **Read** - Someone reads a book, magazine or other print item borrowed from the library, to the child (or, the child reads to someone else). Reading can be further classified according to -
 - a. Who does the reading
 - Mother**
 - Father**
 - Sibling**
 - Child Care Provider**
 - Child**
 - Other** (please specify; eg. grandmother, step-parent, visiting neighbour, etc.)
 - Missing Value** (it is impossible to tell from the data sources who did the reading)
 - NOTE - The child does not have to accurately decode text to "read." For example, if a child clearly mimics the reading process by articulating text out loud, using text conventions like saying "the end" at the end of a story or holds the book up for an audience to see, they are "reading" rather than "perusing/browsing" materials.
 - b. The context in which the reading occurs
 - Naptime** - as a prelude to a daytime nap
 - Bedtime** - as a prelude to going to sleep for the night
 - Daytime** - as a part of awake, daytime activities

Other - other circumstances (please specify)

Missing Value - it is impossible to determine the context from the data sources.

2. **Peruse** - Child looks through or browses print materials borrowed from the library. This is usually, but not always, an independent activity. No actual decoding of the text occurs. Nor does the child mimic reading behaviour.
3. **View** - Child watches part or all of one or more videos borrowed from the library.
4. **Listen** - Child listens to part or all of one or more audio-recordings (including CDs and audio-cassettes) borrowed from the library.
5. **Talk** - The child talks about materials borrowed from the library. This includes talk about the content of library materials, authors, titles, etc.
6. **Play** - The child engages in play that is directly linked to the content of library materials. For example, the child acts out a story from a library book or video; the child assumes the role of a character from a library book.
7. **Other** - The child engages in other activities linked to library materials. For example the child might play with toys borrowed from the library; the child might sleep with library materials; the child might carry library materials around with them or take them along on a trip out of the home; or the child might use the materials as physical toys to build a house.

LIBRARY

This broad category refers to activities related to library services and facilities other than the use of materials borrowed from the collection.

1. **Visit** - The child makes one or more additional public library visits. Visits may be made for any purpose (for example to return materials, to attend a library program, to borrow more materials).
2. **Talk** - The child talks about the library. This includes talking about things that have or might happen there (including programs, reference and reader's advisory services, check out and return of materials, etc.), talking about the facility and its noncollection resources (e.g. exhibits, toys), talking about the staff.
3. **Play** - The child plays library activities. For example, the child might play story time or play checking out materials.

4. **Other** - This includes other activities related to the library. For example, playing with a craft made in a library program.

RESEARCH

This broad category refers to activities related to the process of conducting the research study.

1. **Talk** - The child talks about the research study, her participation in it, or the researcher.
2. **Play** - The child "plays" the research process. For example, taking field notes; assuming the role of the researcher.
3. **Other** - The child engages in activities other than talk and play that relate to the research process.

General Instructions:

1. Identify incidents of the above behaviour by marking off segments of the numbered text.
2. Label incidents by both broad and subcategories. Egs.
LIBRARY - Talk
MATERIALS - Play
3. For the category MATERIALS - Read, also code for reader and the context.
Eg.
MATERIALS - Read
Mother
Bedtime
4. A single incident may include more than one example of a particular type of behaviour. Incidents end when the child moves on to a different sort of activity. For example, a single incident of (Materials - Read) would be counted when a parent reads three stories to a child so long as the story reading is consecutive and not interrupted by other activities.
5. Although I am primarily interested in the week immediately following the study visit (V+0 through V+7), please code all entries.

APPENDIX IX.4 - CODE MANUALS: LEARNING OPPORTUNITIES CODE MANUAL

CODE BOOK - LEARNING OPPORTUNITIES

RESEARCH QUESTION: Is there any evidence that public library services encourage learning by preschool children?

NOTE: I have used learning in the sense of learning opportunities or chances for the child to increase her understanding in some area of knowledge. To qualify as an incident of learning opportunity there is no need to demonstrate that the child actually learned something (as one might, for instance, through a pre-test/post-test protocol). Rather, the child must be actively involved in an exchange of information. For example, the child might listen while a mother explains what a word encountered in a story means, how to behave while in the library or how to put a puzzle together. Behaviour that shows a child understands or is trying to understand some information related to the library and its services also counts as evidence of a learning opportunity. For example, an incident of a child searching for a book on the shelf by scanning spine labels for a call number indicates that the child understands something about how materials in libraries are organized and suggests that libraries provide an opportunity for children to learn how libraries work. Learning opportunities can happen when the child is with another (mother, staff member, or other person) or when the child is alone.

Data Sources: Library visit transcripts; Diary transcripts; Follow-up interview transcripts.

STORIES

This broad category refers to the learning opportunities provided through the library's collections (print and nonprint; fiction and nonfiction).

1. **Children's Literature** - The child has an opportunity to learn or shows evidence of understanding something about children's literature. For example, the child might recognize or ask for a book by a specific author and/or illustrator, about a specific character or by a specific title. Do not include incidents where a mother (or someone else) simply reads a title or author's name from a cover during selection or browsing/reading of materials. There needs to be recognition or discussion of a familiar or characteristic element of an item for an incident to be counted as an opportunity to learn about or evidence of knowledge of children's literature.
2. **Structure** - The child has an opportunity to learn or shows evidence of understanding how stories and/or books work. For example the child might show evidence of understanding the structure of a text by voicing ritual openings (e.g. "Once upon a time") or closings (eg. "The end") while using a

story; the child might play story by making up a story with a beginning, middle and end using characters either imagined or drawn from real stories; or the mother or child might comment on the parts of book such as the title page or the end papers or features of a story such as the title, authorship or illustrator statements.

3. **Content** - The child has an opportunity to learn or shows evidence of having learned some or all of the content of a library item. For example the child may learn the meaning of a word encountered in a story (build vocabulary); the child may use the content of a story to help her understand something she has experienced elsewhere; or the child may use something she has experienced elsewhere to help her understand what is happening in a book. The emphasis in this category is on the content of library materials and its ability to increase the child's understanding of the world.
4. **Reading** - The child has an opportunity to learn or shows evidence of skills associated with the actual reading or decoding of text. For example, the child might try to decode a portion of text by sounding out letters or words; the child might mimic reading by making up text or repeating memorized text while they look through a book; or the child might use closure or prediction to complete portions of a text read by another.

SERVICES

This broad category refers to learning opportunities available through services provided by the library other than its collections.

1. **Libraries** - The child has an opportunity to learn or shows evidence of knowing how libraries work. For example, the child might participate in returning or checking out library materials; the mother might show the child how to retrieve a book by call number; the child might play library; the child and mother might talk about an appropriate number of library materials to borrow; or the mother might tell the child how to behave while in the library or how to care for library materials.
2. **Toys** - The child has an opportunity to learn something through the use of a toy, puzzle or other plaything provided in the library. For example, a mother might provide information about how to use a plaything such as suggesting that puzzle pieces be turned around to fit into a puzzle form; or a child might learn to identify and make the sound of animals that are pieces of a puzzle. Incidents of using playthings to create stories are included in this category rather than "STORIES - Structure" as it is the plaything rather than the story that more directly gives rise to this behaviour. Simply playing with the item without showing any evidence of trying to understand how it works or how it might be

used to learn something (through behaviours like asking questions about it, experimenting with how to use something, seeking help in using the toy or responding to another's questions and comments about the toy) does not count as an incident of a learning opportunity.

3. **Social Interaction** - The child has an opportunity to learn how to interact with others who are not members of her own family. For example the mother might provide guidance or suggestions about sharing library materials or toys; a library staff member might provide instruction about how to participate in a group activity such as suggesting that a child sit down during the reading of a story at story time; or the mother might show the child how and how not to interact physically with a baby or smaller child.

General Instructions

1. Identify incidents of the above behaviours by marking off segments of numbered text.
2. Label incidents by both broad and subcategory. Examples
SERVICES - Toys
STORIES - Reading
3. For all incidents also code for who was interacting with the child when the incident took place as follows:
 - Alone:** The child was not interacting with anyone.
 - Mother:** The child was interacting with her mother when the incident took place.
 - Other:** The child was interacting with someone other than the mother when the incident took place. Please specify (for example - library staff, another adult, younger sibling, older sibling, another adult library user, another child library user).
 - Missing Value:** It is impossible to tell if the child was alone or interacting with another when the incident took place.
4. A single incident of a learning opportunity ends when the child moves on to another activity because the task is completed or she has lost interest, or the topic of discussion changes. To count two incidents of a learning opportunity, the incidents must be separated by other distinct activities or the topic must be different from the first incident. For example, if a mother were to help a child with orienting puzzle pieces correctly while the child put together four puzzles this would count as one incident of "SERVICES - Toys" because the type of activity did not change. If a child were to ask for definitions for two different words encountered while reading a story this would count as two incidents of "STORIES - Content" because the topic had changed. If a child returns to an earlier topic of conversation to seek more or confirmation of information, the

two portions of the transcript together count as one incident. You should mark both on the transcript and link the second portion to the first by noting "linked to (line numbers) above."

5. Code both the library visit transcripts and the diary transcripts.

APPENDIX X - DATA SUMMARIES BY CASE

APPENDIX X.1
GENERAL VISIT CHARACTERISTICS BY CASE - SITE C

Characteristic	C1 Raya	C2 Elissa	C3 Sadako	C4 Catherine	C5 Jenna	C6 Chloe	C7 Lisa	C8 Madeline
Visit length (minutes)	26	37	60		67	95	61	77
Time of day: Morning Afternoon Evening	X	X	X	X	X	X	X	X
Day of week	Tue	Tue	Fri	Sat	Tue	Fri	Wed	Thur
Month	May	Mar	Apr	Apr	Jul	Nov	Nov	Jul
Siblings present (No.)	1E ³¹	0	1Y	0	0	0	0	0
Others present (No.)	0	0	0	0	0	0	0	0
Materials borrowed (No.)	6	11	3	17	4	40	9	6

³¹ In Appendices X.1 through X.4, Y designates a younger sibling and E designates an older sibling.

**APPENDIX X.2
GENERAL VISIT CHARACTERISTICS BY CASE - SITE E**

Characteristic	E1 Whitney	E2 Elizabeth	E3 Anije	E4 Danielle	E5 Alexis	E6 Gillian	E7 Emily	E8 Genevieve
Visit length (minutes)	55	85	49	40	112	37	86	35
Time of day: Morning Afternoon Evening	X	X	X	X	X	X	X	X
Day of week	Tue	Fri	Thur	Wed	Wed	Fri	Wed	Thur
Month	Mar	Jul	Dec	Nov	Jan	Jan	Feb	Feb
Siblings present (No.)	0	1Y	1E	1E	0	1Y	1Y	0
Others present (No.)	0	0	0	1	0	0	0	0
Materials borrowed (No.)	7	6	17	13	7	5	12	6

**APPENDIX X.3
GENERAL VISIT CHARACTERISTICS BY CASE - SITE J**

Characteristic	J1 Laura	J2 Sarah	J3 Sacha	J4 Lesley	J5 Fatima	J6 Kaitlyn	J7 Katie
Visit length (minutes)	118	75	31	25	21	30	53
Time of day: Morning Afternoon Evening	X 	 X 	 X 	X 	X 	X 	 X
Day of week	Thur	Thur	Sat	Tue	Sat	Wed	Tue
Month	Nov	May	Nov	Jan	Jan	Feb	Jan
Siblings present (No.)	1Y	1Y	1E	0	1Y	1Y	1Y
Others present (No.)	0	0	0	0	0	0	1
Materials borrowed (no.)	6	7	12	5	14	5	7

APPENDIX X.4
GENERAL VISIT CHARACTERISTICS BY CASE - SITE S

Characteristic	S1 Maggie	S2 Kim	S3 Anna	S4 Rebecca	S5 Marissa	S6 Ruthie	S7 Hannah
Visit length (minutes)	30	12	29	26	45	27	45
Time of day: Morning Afternoon Evening	X	X	X	X	X	X	X
Day of week	Tue	Tue	Wed	Tue	Thur	Tue	Fri
Month	Aug	Nov	Nov	Nov	Dec	Nov	Feb
Siblings present (No.)	0	1E	1Y	1Y	0	1Y	2Y
Others present (No.)	0	0	0	0	0	0	0
Materials borrowed (no.)	4	4	6	2	8	8	26

**APPENDIX X.5
LIBRARY VISIT ACTIVITIES BY CASE - SITE C**

Activity	C1 Raya	C2 Elissa	C3 Sadako	C4 Catherine	C5 Jenna	C6 Chloe	C7 Lisa	C8 Madeline
Return materials				/c	/c			
Choose materials: Select	X ³² /c	X /c	X	X	X	X /c	X	X
Catalogue search								X
Reader's advisory		X	X		X	X	X	X
Reference	X							X
Use materials: Peruse				X	X	X	X	X
Read		X	X /c	X	X	X	X	X
Listen/view								
Play	X	X	X	X	X /c	X	X	X
Interaction: Social interaction	X	X	X	X	X /c	X /c	X	X
Observation	X		X	X	X	X		
Staff interaction	X	X	X		X		X /c	X
Do an activity: Exhibit	X	X	X	X			X	X
Formal program					X		X	
Informal program	X	X			X		X	
Facility use				X		X		X
Check out	X	X		/c	X	X /c	X	X

³² In Appendices X.5 - X.10, X indicates that one or more incidents of an activity occurred and /c indicates that one or more counter examples of an activity occurred.

**APPENDIX X.6
LIBRARY VISIT ACTIVITIES BY CASE - SITE E**

Activity	E1 Whitney	E2 Elizabeth	E3 Antje	E4 Danielle	E5 Alexis	E6 Gillian	E7 Emily	E8 Genevieve
Return materials		X	X					X
Choose materials: Select	X	X	X /c	X /c	X	X	X	X
Catalogue search	X		X	X	X	X	X	X
Reader's advisory	X	X	X	X	X	X	X	X
Reference	X							
Use materials: Peruse	X	X	X			X	X	X /c
Read	X							
Listen/view								
Play	X /c	X	X	X /c	X	/c	X	X
Interact with others: Social interaction	X /c	X			X /c		X	
Observation		X			X	X	X	
Staff interaction	X	X	X	X		X		X
Do an activity: Exhibit	X							
Formal program	X	X	X	X	X	X	X	X
Informal program								
Facility use		X						
Check out	X /c	X /c	X	X	X	X	X	X

**APPENDIX X.7
LIBRARY VISIT ACTIVITIES BY CASE - SITE J**

Activity	J1 Laura	J2 Sarah	J3 Sacha	J4 Lesley	J5 Fatima	J6 Kaitlyn	J7 Katie
Return materials		X	/c		X	X	X
Choose materials: Select	X	X	X /c	X /c	X	X	X
Catalogue search			X				X
Reader's advisory	X			X	X		/c
Reference					X		X
Use materials: Peruse							
Read	X	X /c	X	X /c		X	X
Listen/view							
Play		X	X	X		X	
Interact with others:							
Social interaction	X	X	X /c	X			
Observation							
Staff interaction	X /c	X /c	X	X	X		X
Do an activity: Exhibit			X		X		
Formal program	X	X	X				
Informal program							
Facility use			/c				X
Check out		X	X	X	X	X	X

**APPENDIX X.8
LIBRARY VISIT ACTIVITIES BY CASE - SITE S**

Activity	S1 Maggie	S2 Kim	S3 Anna	S4 Rebecca	S5 Marissa	S6 Ruthie	S7 Hannah
Return materials			X	X	X	X	X
Choose materials: Select	X	X	X	X	X	X /c	X
Catalogue search	X	X		X			X
Reader's advisory	X			X			X
Reference	X			X			X
Use materials: Peruse				X			X
Read	X /c		X /c	X	X	/c	X
Listen/view							
Play	X	X	X	X	X	X	X
Interact with others:							
Social interaction	X /c	X				X	
Observation	X	X	X				
Staff interaction	X		X	X	X	X	X
Do an activity: Exhibit							
Formal program							
Informal program	X						
Facility use				/c			
Check out	X	X	X	X	X		X

**APPENDIX X.9
POST-VISIT LIBRARY-RELATED ACTIVITIES BY CASE - SITE C**

Activity	C1 Raya	C2 Elissa	C3 Sadako	C4 Catherine	C5 Jenna	C6 Chloe	C7 Lisa	C8 Madeline
Materials								
Read	X	X	X	X	X	X	X /c	X
Peruse					X		X	X
View			X					X
Listen				X			X	X
Play							X	
Talk	X						X	
Other		X					X	
Library								
Talk			X	X			X	X
Visit		X	X	X	X	X	X	X
Play								
Other					X		X	X
Research								
Talk	X		X	X	X			
Play				X				

**APPENDIX X.11
POST-VISIT LIBRARY-RELATED ACTIVITIES BY CASE - SITE J**

Activity	J1 Laura	J2 Sarah	J3 Sacha	J4 Lesley	J5 Fatima	J6 Kaitlyn	J7 Katie
Materials							
Read	X	X	X	X	X	X	X
Peruse		X		X	/c X	X	X
View			X		X		X
Listen				X	X	X	
Play		X		X	X	X	
Talk	X		X	X	X		
Other			X		X		
Library							
Talk	X	X		X	X	X	X
Visit	X	X	X	X	X		X
Play		X					
Other	X						
Research							
Talk		X		X			X
Play							

**APPENDIX X.12
POST-VISIT LIBRARY-RELATED ACTIVITIES BY CASE - SITE S**

Activity	S1 Maggie	S2 Kim	S3 Anna	S4 Rebecca	S5 Marissa	S6 Ruthie	S7 Hannah
Materials							
Read	X	X	X	X	X	X	X
Peruse		X			X	X	X
View	X	X			X	X	X
Listen						/c	X
Play				X			X
Talk	X						X
Other	X					X	X
Library							
Talk	X		X	X			X
Visit					X		X
Play							X
Other	X	X					
Research							
Talk	X		X	X			
Play						X	

**APPENDIX X.13
LEARNING OPPORTUNITIES DURING LIBRARY VISITS BY CASE - SITE C**

Learning Opports. ³³	C1 Raya	C2 Elissa	C3 Sadako	C4 Catherine	C5 Jenna	C6 Chloe	C7 Lisa	C8 Madeline
Services	X							
Libraries		X	X	X	X		X	X
Toys		X	X	X	X	X		X
Soc. int.			X	X		X		X
Other				X			X	
Stories								
Ch. lit.		X	X		X	X	X	X
Structure		X			X			X
Content		X	X		X		X	X
Reading		X			X			X
Other		X			X			

³³ In Appendices X.13 - X.20, Learning Opportunities is abbreviated as Learning Opports, Social interaction is abbreviated as Soc. int. and Children's literature is abbreviated as Ch. lit.

**APPENDIX X.15
LEARNING OPPORTUNITIES DURING LIBRARY VISITS BY CASE - SITE J**

Learning Opports.	J1 Laura	J2 Sarah	J3 Sacha	J4 Lesley	J5 Fatima	J6 Kaitlyn	J7 Katie
Services							
Libraries	X	X	X	X	X	X	X
Toys			X	X			
Soc. int.		X	X	X	X		X
Other							
Stories			X		X	X	X
Ch. lit.	X				X	X	X
Structure	X				X	X	X
Content	X			X	X	X	X
Reading	X						
Other							

**APPENDIX X.16
LEARNING OPPORTUNITIES DURING LIBRARY VISITS BY CASE - SITE S**

Learning Opports.	S1 Maggie	S2 Kim	S3 Anna	S4 Rebecca	S5 Marissa	S6 Ruthie	S7 Hannah
Services							
Libraries	X	X	X	X	X	X	X
Toys	X		X		X		X
Soc. int.			X				
Other		X					
Stories							
Ch. lit.	X	X	X	X	X	X	X
Structure	X	X	X		X		X
Content	X		X	X	X	X	
Reading	X	X		X	X		X
Other					X		

**APPENDIX X.19
LIBRARY-RELATED LEARNING OPPORTUNITIES REPORTED IN THE WEEK FOLLOWING
LIBRARY VISITS BY CASE - SITE J**

Learning Opports.	J1 Laura	J2 Sarah	J3 Sacha	J4 Lesley	J5 Fatima	J6 Kaitlyn	J7 Katie
Services							
Libraries	X	X			X		
Toys							
Soc. int.	X						
Other							
Stories							
Ch. lit.	X				X		X
Structure	X	X	X	X	X		X
Content	X	X	X	X	X		X
Reading	X	X	X	X	X		X
Other							

**APPENDIX X.20
LIBRARY-RELATED LEARNING OPPORTUNITIES REPORTED IN THE WEEK FOLLOWING
LIBRARY VISITS BY CASE - SITE S**

Learning Opports.	S1 Maggie	S2 Kim	S3 Anna	S4 Rebecca	S5 Marissa	S6 Ruthie	S7 Hannah
Services							
Libraries	X						X
Toys							
Soc. int.							X
Other							
Stories							
Ch. lit.	X						X
Structure			X				X
Content		X		X		X	X
Reading	X		X	X			X
Other	X						

**APPENDIX X.21
NUMBER OF INCIDENTS OF LEARNING OPPORTUNITIES BY CASE**

Case	During the Library Visit	Week following library visit	Total
Site C			
C1 - Raya	2	3	5
C2 - Elissa	14	4	18
C3 - Sadako	12	2	14
C4 - Catherine	14	12	26
C5 - Jenna	13	5	18
C6 - Chloe	6	1	7
C7 - Lisa	16	2	18
C8 - Madeline	10	7	17
Site E			
E1 - Whitney	11	6	17
E2 - Elizabeth	21	5	26
E3 - Antje	9	2	11
E4 - Danielle	11	1	12
E5 - Alexis	7	1	8
E6 - Gillian	12	7	19
E7 - Emily	28	4	32
E8 - Genevieve	10	2	12
Site J			
J1 - Laura	61	12	73
J2 - Sarah	3	18	21
J3 - Sacha	11	8	19
J4 - Lesley	9	3	12
J5 - Fatima	9	26	35
J6 - Kaitlyn	13	0	13
J7 - Katie	31	2	33
Site S			
S1 - Maggie	14	3	17
S2 - Kim	11	1	12
S3 - Anna	24	1	25
S4 - Rebecca	9	2	11
S5 - Marissa	22	3	25
S6 - Ruthie	6	3	9
S7 - Hannah	27	23	50

APPENDIX XI - LIBRARY MATERIALS CITED IN THIS REPORT

Author, title and first date of publication are provided for all books and multi-media kits wherever possible. Title, producer and date are listed for video-recordings wherever possible. The original sources for these citations are the ethnographic records, especially my field notes and the mothers' diaries. I did not always have materials in hand during data collection, making notes through observation. Mothers did not always record full information for each title. Therefore, more specific information about publisher, place of publication and edition is not included. All citations were checked against *Books in Print* (1995-96 edition) and the catalogue of the library where the study was conducted.

Picture Books

- Ahlberg, Janet, and Allan Ahlberg. *Funny bones*. 1980.
- Asbjornsen, Peter C. *The three billy goats gruff*. Retold by Tim Arnold. 1993.
- Asch, Frank. *Happy birthday moon*. 1982.
- ____. *Just like daddy*. 1981.
- ____. *Mooncake*. 1983.
- Awdry, W. *Thomas the tank engine*. 1946.
- Bourgeois, Paulette. *Franklin stories*. A series of books whose first title is *Franklin in the dark*, 1986.
- Bridwell, Norman. *Clifford's family*. 1984.
- Brooke, L. Leslie. *Nursery rhyme picture book*. 19__.
- Bruna, Dick. *I can count*. 1968.
- ____. *I can read difficult words*. 1978.
- Brunhoff, Jean de. *Babar and his children*. 1938.
- ____. *Babar's little girl*. 1987.

- Burton, Virginia Lee. *The little house*. 1942.
- _____. *Mike Mulligan and his steam shovel*. 1939.
- Byars, Betsy. *The Golly sisters ride again*. 1994.
- Carle, Eric. *The very hungry caterpillar*. 1969.
- Carlstrom, Nancy White. *Jesse bear's yum yum crumble*. 1994. (Board book)
- Chenery, Janet. *Wolfie*. 1969.
- Day, Alexandra. *Good dog, Carl*. 1985.
- DePaola, Tomie. *Haircuts for the Woolseys*. 1989.
- Dinardo, Jeffrey. *Henry's Christmas star*. n.d.
- Disney's Beauty and the beast*. Adapted by A.L. Singer. 1991.
- Fatio, Louise. *The happy lion*. 1954.
- Freeman, Don. *Norman the doorman*. 1959.
- Hennesey, B. G. *The dinosaur who lived in my backyard*. 1988.
- Hill, Eric. *The fairy tale peek-a-book*. 1984.
- _____. *Spot learns to count*. 1983.
- _____. *Spot's big book of colors, shapes and numbers*. 1994.
- Jaspersohn, William. *How the forest grew*. 1980. (Nonfiction)
- Koontz, Robin M. *Chicago and the cat: The camping trip*. 1994.
- L'Engle, Madeleine. *The glorious impossible*. 1990.
- Lilly, Kenneth. *Animal builders*. 1984. (Board book)
- Martin, Bill. *The wizard*. 1994.
- Mayle, Peter. *Where did I come from?* 1973. (Nonfiction)

- McQueen, John T., and Narc T. Brown. *A world full of monsters*. 1986.
- Munsch, Robert. (Canadian picture book author. One of his early prominent works is *The paper bag princess*, 1980)
- Potter, Beatrix. *The tale of little pig Robinson*. 1930.
- _____. *The tale of Mr. Tod*. 1912.
- _____. *The tale of Timmy tiptoes*. 1911
- Provenson, Alice, and Martin Provenson. *The year at Maple Hill farm*. 1978.
- Rey, H. A. *Curious George*. 1951.
- _____. *Curious George goes to the hospital*. 1966.
- _____. *Curious George rides a bike*. 1952.
- _____. *Curious George takes a job*. 1947.
- Titles derived from television shows developed around the character of Curious George but not written by H. A. Rey:
- Curious George and the dump truck*. 1984.
- Curious George goes camping*. 1990.
- Curious George visits a police station*. 1987.
- Robart, Rose. *The cake that Mack ate*. 1986.
- Rockwell, Anne F. *Willy can count*. 1989.
- Rowe, Erna. *Giant dinosaurs*. 1973.
- Sendak, Maurice. *In the night kitchen*. 1970.
- Seuss, Dr. *The cat in the hat*. 1957.
- Wallwork, Amanada. *Bugs*. 1994. (Board book)
- Watanabe, Shigeo. *What a good lunch!* 1978.
- Williams, Vera. *A chair for my mother*. 1982.

Traditional Stories

References were made to these traditional stories independently from specific texts.

Little red riding hood

Princess and the pea

Rapunzel

Video-recordings

Ghostwriter. (A series of video-recordings produced by Republic Pictures Home Videos based on the television show *Ghostwriter*.)

Animal stories. Weston Woods. 1989.

Barney's camp fire sing-along. Barney Home Video. 1990.

Homeward bound. Walt Disney Home Video. 1993.

Lion king. Walt Disney Home Video. 1995.

Madeline. Weston Woods. n.d.

Sesame Street visits the hospital.

State fair.

Snowman.

Multi-Media Kits

Awdry, W. *Diesel's devious deed*. 1992.