

UNDERSTANDING YOUNG CHILDREN'S AGENDAS, EXPERIENCES,  
AND LEARNING FROM A FIELD TRIP TO A ZOO

by

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## **Abstract**

School field trips to informal education venues (such as museums, zoos, aquariums, science centres, and art galleries) can be enjoyable, memorable, learning experiences for children. Children have unique personal histories of experiences, interests, and knowledge that they can bring to field trips to informal education venues. This study examined the agendas (desires, hopes, and expectations) of young children for a school field trip, and the impact of these agendas on the children's experiences and learning on the trip.

A qualitative, case study approach was used to examine in-depth a field trip taken by children in a grade 1 and 2 (combined) class to a zoo. The study sought to highlight the voices of the children in the study, and to understand the field trip experience from their perspectives. The study generated a descriptive and interpretive account of the children's meanings and experiences of the field trip.

The study was exploratory and generated emergent understandings regarding the children's field trip agendas, experiences, and learning. Each child had a unique, multifaceted agenda for the field trip that they created prior to the trip. The children's pre-visit agendas included exhibit-based, activity-based, social, and affective elements. The children's pre-visit agendas appeared to be shaped prior to the visit by six factors: previous visits to zoos, previous indirect experiences with animals, desires to see animals they had never seen before, personal interests, prior knowledge, and school-related activities. An analysis of the field trip experiences of a subgroup of children revealed that these children appeared to construct exhibit-based and social agendas during the field trip, and these agendas were shaped by factors at the zoo. The children's agendas were found to impact on their field trip experiences and learning in numerous ways. Rewarding experiences of learning, enjoyment,

and/or engagement were found to come from many children's experiences seeing animals that were part of their pre-visit agendas for the field trip. Many children conveyed that they had missed out on elements of their agendas during the field trip.

Implications and recommendations for practice and future research are discussed.

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# 1 Introduction

Field trips to informal education venues<sup>1</sup> are a part of the school experiences of millions of students in Canada and around the world. Research in the fields of education and visitor studies has found that field trips can be enjoyable, memorable, learning experiences for children (e.g., Falk & Dierking, 1997; Price & Hein, 1991; Wolins, Jensen, & Ulzheimer, 1992). Field trips to informal education venues have been found to contribute to students' learning in multiple dimensions, including the cognitive, affective, emotional, and social domains (e.g., Anderson, Lucas, Ginns, & Dierking, 2000; Gilbert & Priest, 1997; Rennie 1994). However, few studies have focused on the field trip experiences of young children in the early childhood years (ages 0 to 8). Furthermore, and significantly, few studies have studied field trips from the perspectives of children themselves. Although children are the key stakeholders in field trips, researchers rarely have asked them for their views and ideas about their field trip experiences. The voices of young children in particular regarding their field trip experiences are under-represented in the research literature (Piscitelli & Anderson, 2001).

Numerous studies have been undertaken to examine children's learning and experiences on field trips and to identify field trip practices that support children's learning. Studies have found that such practices include: connecting and integrating field trips into classroom learning; preparing children for field trips with pre-visit orientations; engaging children in active, multisensory learning activities on field trips; and incorporating social experiences into field trips (e.g., Anderson et al., 2000; Anderson, Piscitelli, Weier, Everett, & Tayler, 2002; Orion and Hofstein, 1994; Watson, Aubusson, Steel, & Griffin, 2002;

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<sup>1</sup> The term informal education venue is used in a broad sense in this thesis to include museums, zoos, aquariums, nature centres, science centres, art galleries, and botanical gardens.

Wolins et al., 1992). In the field of visitor studies, research has found that visitors have what have been termed 'agendas' for their visits, including desires, expectations, motivations, intentions, and plans (e.g., Briseno-Garzon, 2005; Dierking & Falk, 1994; Moussouri, 2003); studies also have found that visitors' agendas can influence the way they experience their visits and their learning from the visits (e.g., Falk, Moussouri, & Coulson, 1998; Moussouri, 2003). Yet, very few studies have examined this area of study in the context of children's school field trips to informal education venues, particularly young children's field trips. Children, like all visitors, have their own unique life histories of experiences, interests, and knowledge that they can bring to field trips to informal education venues, and construct their own meanings and experiences from these visits (e.g., DeMarie, 2001; Dierking, 2002). Understanding young children's perspectives, agendas, and experiences regarding their field trips could help teachers, informal educators, and researchers better facilitate valuable field trips that support young children's learning.

## **1.1 Problem statement**

Few studies have investigated the experiences of young children in informal education venues, especially from the perspectives of the children themselves; therefore, they remain a greatly under-researched demographic class of visitors (Piscitelli & Anderson, 2001). No known research to date has investigated in an in-depth manner the personal agendas of young children for their field trips and how these agendas impact on their experiences and learning on field trips. Research that investigates young children's agendas and agenda-related experiences and learning on a field trip, particularly from the perspectives of the children themselves, could generate understandings regarding the ways children

approach, experience, and learn from field trips. These understandings could contribute to the better development, planning, and facilitation of field trip programs that support valuable learning and experiences by young children.

## **1.2 Purpose statement**

The purpose of this study is to understand young children's (in grades 1 and 2) agendas for a field trip to a zoo and the impact of these agendas on the children's experiences and learning from the field trip. An agenda is defined as the desires, hopes, and expectations of an individual for a visit to an informal education venue, and is considered to be constructed both before and during the visit.

## **1.3 Significance**

This study provides one of the first known, in-depth examinations of the agendas of young children for a school field trip to an informal education venue and the impact of those agendas on the children's experiences and learning during the trip. This study was undertaken to generate new insights into young children's field trip experiences and highlight the voices of young children regarding their field trip experiences. As indicated earlier, these insights can be used by teachers and informal educators in designing, planning for, and facilitating valuable, enjoyable field trip programs that support young children's learning in multiple dimensions. The study contributes new understandings to the research literature in the fields of education and visitor studies, and raises and leaves unaddressed new questions that could be investigated in future studies.

## **1.4 Overview of methodology**

A qualitative methodology was used in this study with the purpose to understand the meanings and experiences that children bring to and construct from a field trip. A case study method (Merriam, 1998; Stake, 1995; Yin, 2003, chap. 1) was used to study in-depth a single case of a field trip taken by children in a grade 1 and 2 (combined) class to the Toronto Zoo, Toronto, Canada. The study sought to provide a descriptive and interpretive account of the children's field trip agendas, experiences, and learning. The study sought to give a voice to the young children in the study and to understand the field trip experience from their perspectives.

Multiple methods of data collection were employed to document the case and the children's 'voices'. These methods included: pre- and post-visit interviews with the children, pre- and post-visit drawings by the children, observations of pre- and post-visit classroom activities, video recording of a subgroup of children during the field trip, parent/guardian questionnaires, and review of relevant documents. The participants in the study comprised the participating children, the classroom teacher, the zoo educator who led the field trip program, and parents/guardians of the participating children. The researcher acted as a participant-observer in the field, and participated in many of the activities of the children's classroom community in this role. Data analysis included transcription and coding of the data, followed by category construction, direct interpretation, and theme generation. As this was one of the first known studies to examine in-depth young children's agendas for a field trip, the study sought to reveal emergent relationships and themes regarding the children's agendas, experiences, and learning on the field trip. The study does not draw generalisations from the case, but leaves it to the reader to make naturalistic or reader generalisations from

the findings and conclusions of the study to other cases of interest to them (Merriam, 1998; Stake, 1995).

### **1.5 The informal education venue context**

A field trip to the Toronto Zoo formed the core of the context of this study. The Toronto Zoo is the largest zoo in Canada, and receives approximately 1.2 million visitors per year (Toronto Zoo, n.d.-a). The zoo's vision statement is articulated as follows: "The Toronto Zoo is Canada's premier Zoo, known for its interactive education and conservation activities. As a unique wildlife experience, we inspire people to live in ways that promote the well being of the natural world" (Toronto Zoo, n.d.-a). The Toronto Zoo contains over 5,000 animals that are exhibited in outdoor environments and indoor pavilions; the exhibits are organized and divided by the animals' geographic regions (Toronto Zoo, n.d.-a). The Toronto Zoo offers a variety of field trip program options to teachers and students (Toronto Zoo, n.d.-b). The context of this study was a whole-day workshop field trip program at the zoo. This workshop program was led by a zoo educator, and included a presentation, activities, and guided tours of the zoo's exhibits.

### **1.6 The author**

As author of this study, I have a diverse background of experience in education, interpretation, and recreation. My professional experience has included designing, developing, facilitating, and managing educational programming for the public and school groups in a variety of informal settings. I have Bachelor degrees in education and science. The research questions of this study arose from my personal interests in young children's

learning, informal education, and science education. Furthermore, the purpose and questions of the study grew from my personal valuing of young children as active, vibrant, competent individuals with their own unique perspectives and ideas. This study grew from my interest in listening to, and highlighting the voices of young children regarding their own learning experiences.

### **1.7. Overview of the thesis**

This first chapter of the thesis provides an introduction to the study, the context of the study, and the author. The second chapter provides a review of the research literature that is most relevant to the study. This review starts with an overview of theories of learning, particularly social constructivism and the multidimensional aspects of learning. The literature regarding field trips is then discussed with a particular focus on the field trip learning and experiences of young children. Subsequently, the literature on visitor agendas is discussed with a focus on the content, construction and shaping, and impacts of these agendas. The literature regarding the agendas of individuals for field trips is then discussed, starting with the agendas of teachers and informal education venues, and concluding with the perspectives and agendas of children.

The third chapter of this thesis provides a detailed description of the methodology of the study. This chapter outlines the study's research questions, methodological approach, case study design, and philosophical framework and beliefs. The study's context and participants are described, as well as the role of the researcher in the field. The study's data collection and analysis procedures are detailed, and the chapter concludes with a discussion of the trustworthiness and ethical considerations of the study.

The fourth chapter outlines the findings of the study. The study's major findings are described in six sections. As is appropriate for a case study, this chapter begins with a description of the case. Subsequently, findings relating to the following areas are considered: the children's pre-visit agendas and agendas generated during the field trip, the factors that shape the children's agendas prior to and during the field trip, and finally the impacts of the children's agendas on their experiences and learning on the field trip.

The fifth and final discussion chapter summarises the conclusions of the study and situates these conclusions within the research literature. This final chapter also considers the limitations and context of the study, the study's implications and recommendations for practice, and recommendations for future research.

## **2 Literature review**

### **2.0 Overview**

This chapter reviews the research literature that is most relevant to this study. It begins with a discussion of theories of learning, including its social, individual, and multidimensional aspects. The chapter continues with a discussion of research relating to field trips as learning experiences for students, and field trip practices that support student learning. The chapter moves on to discuss public visitors' agendas for visits to informal education venues, and reviews the research relating to the nature of public visitors' agendas, the construction and shaping of agendas, and the impacts of agendas on their learning and experiences. The final section of the chapter reviews the research pertaining to the agendas and perspectives of teachers, informal education venues, and ultimately of children themselves for field trip visits. Throughout the chapter there is an emphasis placed on research pertaining to young children in the early childhood years.

### **2.1 Theories of learning**

Learning can be conceived as a process that involves both social and individual aspects. The social constructivist theory of learning stresses the social nature of learning and knowledge construction; educational theorists have also recognised the individual processes of internal construction of knowledge as integral parts of these social learning processes (Cobb, 1994; Driver, Asoko, Leach, Mortimer, & Scott, 1994; Vygotsky, 1978). The following discussion examines learning as described by several educational theorists. The first subsection discusses the social constructivist perspective of learning, as well as perspectives regarding the complementary nature of individual and social aspects of the

learning process. The second subsection discusses the multidimensional aspects of learning, with a particular focus on the perspectives of theorists within the field of informal education.

### **2.1.1 The social and individual aspects of learning**

Within the theory of social constructivism, learning is viewed as an active process of meaning making by individuals within social groups (Driver et al., 1994; Gergen, 1995; Vygotsky, 1978). Social constructivism as a learning theory draws from the ideas of learning developed by Vygotsky (1978) who argued that learning is fundamentally a social process and that all mental functions, such as the formation of concepts, begin as social processes and secondarily become internalised by the individual. His view of learning and development emphasises that they are processes that occur through interaction of the learner with other, more capable peers and adults. Lave and Wenger (1991) proposed that learning occurs through active participation with others in communities of practice, wherein newcomers to the community gradually become fully participatory and skilled members of the community. According to the perspective of Lave and Wenger, learning does not require instruction, but through the process of growing participation in the community, individuals come to perform the activities and speak the language of the community; therefore, learning comes from the active interaction of the learner with all the individuals and resources of the community, not merely with a teacher. Gergen (1995) highlighted the importance of dialogue in the learning process, and advocated that meaning and knowledge do not exist within any individual learner but are constructed only when they are discussed and negotiated between individuals. Driver et al. (1994) described learning specifically in the field of science as a social process wherein learners are introduced to, and enculturated into

the world of scientific practices and ways of knowing. They state that through shared activities and talk, learners come to know the symbols, concepts, and tools of science. Driver et al. (1994) also noted that learning about the natural world occurs in the form of the social construction of “commonsense knowledge” (p. 7) that individuals construct in their everyday lives through experiences and dialogue with other members of their cultural communities. Likewise, Cobb (1994) highlighted the fundamental social nature of learning, characterising it as partly a process of participation and enculturation into the practices of a society.

Learning has been described as involving also the active process of internal construction of knowledge and meaning making within individual learners; (Cobb, 1994; Driver et al., 1994; Hein, 1998, chap. 2). Driver et al. (1994) described the active building of knowledge by individual learners as the core idea of constructivist theory. Hein’s (1998) description of constructivist learning theory also emphasised the key role of active participation of the learner, both with their mind and hands, to construct their own knowledge and meaning from their experiences.

The internal processes of learning have been described to act in conjunction with the social processes of learning (Cobb, 1994; Driver et al., 1994; Vygotsky, 1978). Vygotsky (1978) proposed an approach to learning and development centred on the construct of the “zone of proximal development”, 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” (p. 86). Vygotsky’s view of learning points to the importance of both a learner’s individual level of development and internal learning processes, and the role of

social interaction in the learning process. Driver et al. (1994) argued, like Vygotsky, that learning involves the personal construction of knowledge within individual learners as well as the social processes of interaction with other individuals described above. Cobb (1994) also described individual learning perspectives as complementary to, and providing the background for, social learning perspectives; Cobb asserted that social perspectives rely on the assumption that individual learners engage in active internal construction during the social processes of co-participation and enculturation. Cobb summarised the perspective of the complementary nature of the social and individual processes of learning with his statement, “learning is a process of both self-organization and a process of enculturation that occurs while participating in cultural practices, frequently while interacting with others” (1994, p. 18).

### **2.1.2 The multidimensional aspects of learning**

Consistent with this perspective of learning as an active process of making meaning, learning has been described as multidimensional. As summarised above, the cognitive dimension of learning involves the construction of knowledge and meaning by learners as they interact with the people, symbols, and objects in their worlds (Cobb, 1994; Driver et al, 1994). Learning is also a social process, and learning occurs in the social dimension as learners talk with others, work with others, and are guided by others within their social communities (Cobb, 1994; Driver et al., 1994; Gergen, 1995; Lave & Wenger, 1991; Vygotsky, 1978). However, learning also spans a wider spectrum of dimensions including the affective, emotional, aesthetic, and motivational domains (Anderson et al., 2002; Falk &

Dierking, 2000; Kindler, 1997; McCrory, 2002; Rennie & Johnston, 2004; Schauble et al., 2002; Wellington, 1990).

Schauble et al. (2002) argued that learning as a process of change and making meaning encompasses a broad spectrum of abilities beyond the cognitive realm, including “an expanded sense of aesthetic appreciation, the development of motivation and interest, the formation and refinement of critical standards, and the growth of personal identity” (p. 425). Wellington (1990) specifically emphasised the importance of the affective dimension of learning (as well as the cognitive), including development in such areas as interest, enthusiasm, excitement, openness, as well as motivation and eagerness to learn. Kindler (1997) described the aesthetic, emotional, and affective dimensions of learning, and emphasised the importance of “intuitive delight, overpowering attraction or repulsion, and freewheeling associative responses” (p. 13). Kindler argued for valuing the development of feelings, appetites, enjoyment, appreciation, satisfaction, attitudes, and excitement as vital elements of learning. Rennie and Johnston (2004) asserted that learning is a process of change that can involve changes in attitudes, behaviour, values, and opinions, as well as cognitive outcomes. These researchers all point to the multidimensional nature of learning and the importance of recognising, valuing, and focusing on all of these domains of learning when considering learning and its outcomes.

## **2.2 Learning and field trips**

Field trips to informal education venues are undertaken by millions of school children each year (Price & Hein, 1991). Studies have shown that field trips to these venues can contribute to students’ learning in multiple dimensions (e.g., Anderson et al., 2002; Gilbert &

Priest, 1997; Rennie, 1994). The following discussion describes an overview of this research with a particular emphasis on field trips to informal education venues with a science emphasis (e.g., natural history museums, zoos, aquariums, and science centres). The first subsection describes studies of the learning on field trips by students of a range of ages, while the second subsection focuses more narrowly on the field trip learning and experiences of young children.

### **2.2.1 Field trips as learning experiences**

Some early studies in this field documented cognitive learning gains attained by students from field trips using quantitative, experimental, pre- and post-test study designs. For example, Wright (1980) found that grade 6 students who attended a field trip to a science museum as a review to a unit on human biology showed significant cognitive gains on the subject; these cognitive gains were found to be greater than those of students who received a similar amount of time of review instruction in the classroom. Other studies have examined the cognitive learning of students from field trips using measures that give more insight into the cognitive learning processes involved in the field trip experiences. One such study by Beiers and McRobbie (1992) used pre- and post-visit interviews and a concept mapping technique to measure students' cognitive change as a result of a field trip to a science centre. Beiers and McRobbie concluded that grade 7 students' understanding of the scientific concept of sound (the focus of the trip) was enhanced by the field trip, and some students experienced major changes in their conceptions of this subject. Several studies have documented more closely the activities and dialogue of students on field trips, to examine the learning that is achieved during these activities. For example, Tuckey (1992) interviewed 8-

to 11-year-old students while they interacted with exhibits on a field trip to a science centre as well as after their visit; Tuckey concluded that from these interactive experiences the students built on their prior knowledge to make new connections and extend their understandings of scientific concepts such as electricity, sound, and light. Gottfried (1980), using field trip observations, questionnaires, drawing activities, and post-visit peer teaching sessions, found that the students (age not specified) gained knowledge about animals and skill-based knowledge of scientific experimentation from a field trip to a biology discovery room of a science centre.

A number of studies have documented the multidimensional learning of students resulting from field trips. In a study that analysed the discourse of grade 4 children on a field trip to a science museum, Gilbert and Priest (1997) revealed important findings about both the social and cognitive dimensions of the children's learning. Gilbert and Priest found that the social interaction and discourse among the children in small groups, and between the children and adults (museum educators, the teacher, the researcher), on the field trip led to important group learning. They found that through this discourse the children shared and constructed knowledge together, and also inferred that the children developed individual mental models. Rennie (1994) specifically examined the affective dimension of learning for students in grades 9 to 11 on a field trip to a science centre which involved hands-on experimentation activities. Rennie found that the field trips resulted in important affective learning by the children; this learning included feelings of success in engaging with the science activities, an increased awareness of science, and enjoyment of the field trip and particularly enjoyment of the social aspects of the field trip experiences. Price and Hein (1991) summarised the results of hundreds of evaluation studies of field trip programs to

science education venues by students in kindergarten to grade 6. These authors reported the benefits of the field trips as including excitement and pleasure experienced by the children when engaging in field trip programs. Tunnicliffe, Lucas, and Osborne (1997) studied the dialogue of students ranging in age from preschool to age 12 on field trips to a zoo and a natural history museum. These authors criticised the field trip visits for failing to capitalise on the cognitive learning potential of the students' dialogue during the visits. However, Tunnicliffe et al. reported that the children on the field trips engaged in a high frequency of both affective and emotional dialogue about the animals on the field trip, which suggests that the children engaged in learning in these other dimensions.

Therefore, a number of studies have found field trips to be valuable learning experiences for students in multiple dimensions. These studies demonstrate the learning potential of field trips for students of all ages.

### **2.2.2 Young children's field trip learning and experiences**

Only a small number of studies to date have focused on the learning and experiences of young children (in the early childhood years, ages 0 to 8) during field trips to informal education venues; therefore, they remain an under-researched demographic class of visitors (Piscitelli & Anderson, 2001). The few studies that have focused on young field trip visitors have demonstrated the value of these experiences in the children's learning in multiple dimensions, including cognitively, emotionally, affectively, and socially (e.g., Anderson et al., 2002; McClafferty & Rennie, 1997; Watson et al., 2002; Wolins et al., 1992).

Anderson et al. (2002) studied the field trip experiences of children aged 4 to 6 years; the authors interviewed the children to probe the children's learning from a series of three

field trip visits to a museum (although a different museum was used for each of the four classes studied). Anderson et al. (2002) were struck by the diverse accounts of learning that the children described from their field trips, including descriptions of museum exhibits, knowledge about museum artefacts, and accounts regarding the care of museum specimens. The researchers found that even though each group of children had experienced the same set of museum experiences, the children's most enjoyed and most memorable experiences and exhibits were individual and unique. Wolins et al. (1992) studied grade 3 students' recollections of a series of field trips over a school year (including field trips to museums, art galleries, and zoos) and found that the children described diverse factual learnings from the field trips as well as objects they had encountered, activities in which they had participated, and social interactions they had with peers and educators on the visits. Moreover, Wolins et al. reported that "the most powerful memories are not just about what the child saw or did but about the affective or emotional content of the experience" (1992, p. 26), which emphasises the multidimensional nature of the children's field trip learning experiences. McClafferty and Rennie (1997) examined the learning of children aged 3 to 8 years on school field trips, specifically from interacting with one exhibit in a science centre. This study found that children learned cognitively about the functioning of the exhibit and how to manipulate it, and also were observed to work together to operate the exhibit during the field trip. DeMarie (2001) gained insights into children's field trip experiences by giving children cameras to take photographs on a field trip to a zoo and then interviewing the children after the trip. DeMarie reported her findings by children's age group, and found that the children aged 6 to 8 years mainly took pictures of animal exhibits and described unusual aspects of these animals that they had observed or learned about on the trip. DeMarie found that the

children aged 3 to 5 years focused their photographs on animals, and also on the active and social aspects of their experiences including their interactions with animals in the petting zoo and the legs of children while walking.

Additionally, studies have shown the long term impact of field trips as memorable learning experiences for young children (e.g., Falk & Dierking, 1997; Fivush, Hudson, & Nelson, 1984; Wolins et al., 1992). The study by Wolins et al. (1992) found that the children recalled specific aspects of their learning and experiences from field trips taken throughout the school year, some of which had occurred many months prior to the time of the interviews. Fivush et al. (1984) probed kindergarten children's recollections of a field trip to an archaeology museum. Although this study was focused on the representation of events in children's memories rather than the content of the children's memories, the study found that six weeks and one year after the field trip the children could recall many activities that they had engaged in on the field trip, including digging for fossils in a sandbox and interacting with the museum guide. A study performed by Falk and Dierking (1997) investigated the recollections of people of diverse ages of a field trip that they took in the primary years (grades 1 to 3). Almost all of the study participants (96%), who included children in grades 4 and 8, as well as college students, were able to recall a field trip they had taken in these school years (Falk & Dierking, 1997). The study found that the large majority of the participants recalled events that had happened on the field trip or things that they had encountered, years after having taken the trips; many of the participants also recalled social aspects of the trips, including the people they had been with on the trip, as well as their feelings on the trips.

These studies, though few in number, have shown the important, multidimensional

learning that can take place from young children's field trip experiences, and that this learning can persist over time. Furthermore, these studies highlighted the highly individual nature of the learning and memories of young children from their field trip experiences. These studies showed the particular importance of the cognitive, social, and affective dimensions in young children's field trip learning experiences.

### **2.3 Structure and characteristics of field trips that support learning**

A significant body of research has focused on identifying the practices that contribute to making field trips effective learning experiences for students. This research has been reviewed by several authors over the years, including Bitgood (1989), Rennie and McClafferty (1995), and Griffin (2004). Numerous authors have also published guides of recommendations for field trips, or descriptions of model field trips for teachers (e.g., Cox-Peterson, Marsh, Kisiel, & Melber, 2003; Griffin, 1998; Orion 1993; Rennie & McClafferty, 1995; Reynolds, 1984). The following subsections discuss two areas of this research: (a) studies that have examined the importance of connections between field trip activities and classrooms activities before and after the trip; and (b) studies that have examined the on-site aspects of field trips that are important factors for young children's learning in particular.

#### **2.3.1 Connections between field trips and classroom activities**

A considerable body of literature has examined the value of preparing students for field trips and following-up on field trip experiences in the classroom for students' learning. Studies have suggested that field trips that are connected with, and integrated into, classroom activities and curriculum units are more effective as student learning experiences than field

trips that are treated as an add-on activity or a day out (e.g., Griffin, 1998; Wolins et al., 1992). Several studies have found that engaging students in pre-visit and post-visit activities which link field trip activities with classroom activities can help to increase student learning from field trips in multiple dimensions (e.g., Anderson et al., 2000; Bowker, 2002; Gennaro, 1981). For example, Wolins et al. (1992) concluded that links between field trips and classroom activities and the curriculum was an important factor in the ability of the children in their study to recall their field trip experiences. Anderson et al. (2000) examined the effect of engaging grade 7 students in in-class, post-visit activities following a field trip to a science centre on the students' cognitive learning of the field trip subject matter. The study found that the post-visit activities helped students to continue to construct and reconstruct their cognitive learning from the field trip.

Furthermore, studies have shown that preparing students for field trips through pre-trip orientation sessions can help to increase student learning from their field trip experiences (e.g., Anderson & Lucas, 1997; Balling, Falk, & Aronson, 1980; Kubota & Olstad, 1991; Orion & Hofstein, 1994). Orion and Hofstein (1994) found that high school students who were prepared for a geology field trip to an outdoor space through comprehensive pre-visit orientation sessions were observed to show a higher level of on-task learning behaviour during the field trips than students who were not prepared with this type of orientation. The comprehensive orientation included preparing students: cognitively regarding the concepts and skills involved in the field trip; geographically to the area in which the field trip was to take place; and psychologically, in terms of the field trip schedule, route, materials, and learning activities (Orion & Hofstein, 1994). A study by Balling et al. (1980) examined the effect of different types of pre-visit orientation programs on grade 4 students' learning from a

field trip to a zoo. This study found that students who were engaged in a classroom pre-trip program that focused on orienting the children to the zoo space and the field trip schedule and activities achieved significantly greater overall learning from the field trip than students who did not receive a pre-trip program. Furthermore, they found that this pre-trip orientation program had a greater positive impact on children's learning from the field trip than did pre-visit programs that focused on cognitive or observational preparation of the students.

These studies highlight the value of preparing students for all aspects of field trips, and of integrating field trip activities into classroom activities before and after the field trip. The studies of pre-trip orientation sessions draw particular attention to the importance of preparing students regarding the field trip location, schedule, route, and activities, in addition to preparing them cognitively, to help students learn from their field trip experiences.

### **2.3.2 During the field trip**

The few studies that have examined young children's field trip experiences have drawn attention to several aspects of on-site field trip activities that appear to be important factors in facilitating learning for this age group of visitors (Anderson et al., 2002; Fivush et al., 1984; Piscitelli & Weier, 2002; Reynolds, 1984; Watson et al., 2002; Wolins et al., 1992). One such aspect is the presence of contextual links between field trip learning experiences and the socio-cultural worlds of young children (Anderson et al., 2002; Piscitelli & Anderson, 2001). For example, in their study of young children's field trips, Anderson et al. (2002) concluded that "museum experiences embedded within children's familiar culture and contexts are powerful mediators of memory, enjoyment, and learning in these settings" (p. 229). Anderson et al. (2002) found that children recalled, and learned from, field trip

experiences to which they could relate through their personal experiences with toys, books, and other experiences in their homes and classrooms, as well as field trip activities involving story and play, two other important aspects of their socio-cultural worlds.

Several studies have reported the value of active, kinaesthetic, multisensory activities, and activities in which the children have high personal involvement, for young children's learning from field trips (Anderson et al., 2002; Fivush et al., 1984; Watson et al., 2002; Wolins et al., 1992). Fivush et al. (1984) found that all of the kindergarten children they asked in their study recalled a hands-on field trip activity in which they dug for model fossils in a sandbox, immediately and six weeks after the field trip. Anderson et al. (2002) reported that field trip experiences involving kinaesthetic, play-based aspects, such as climbing on an art gallery sculpture, were important and enjoyable learning experiences for the children. Wolins et al. (1992) found that children vividly recalled many specific activities from their field trips in which they experienced high personal involvement, such as when the child was selected as the demonstrator in a presentation.

Finally, field trip experiences with social dimensions, both between children in cooperative and shared activities, and between children and adults who can help to scaffold the children's learning, have been shown to facilitate children's learning and recollections from field trips (e.g., Anderson et al., 2002; Fivush et al., 1984; Piscitelli & Weier, 2002; Reynolds, 1984; Watson et al., 2002; Wolins et al., 1992). Piscitelli and Weier (2002) conducted an observational investigation to identify the aspects of an art gallery exhibit for young children (ages 8 and under) which supported high quality learning experiences on school field trips and within family groups. These researchers found that children's social interactions with each other and with teachers, parents, and gallery educators facilitated and

enhanced the children's learning experiences in the exhibition; furthermore, Piscitelli and Weier stated that they viewed the social interaction of the children with art gallery guides as the most significant factor in enhancing the young children's visit experiences. Anderson et al. (2002) also reported that the children in their study recalled many activities during which they interacted with the museum educators, such as listening to stories or watching theatrical demonstrations or performances. Watson et al. (2002) found that the children's interactions with peers were central to their visits, and that these social interactions resulted in longer engagement by the children with exhibits; cooperative activity in working together to engage with exhibits; and shared learning through modeling, sharing discoveries, and play. However, Watson et al. noted few social interactions between the children and their teacher and parent chaperones, and found that only some of these interactions between the children and their teachers involved learning experiences and the majority were management-oriented.

Overall, these few studies point to key aspects of field trips which help to make them enjoyable and memorable learning experiences for young children. Connections with young children's socio-cultural worlds, and the involvement of children in active, multisensory activities have emerged as important factors in enhancing and facilitating young children's learning from their field trip experiences. These studies also show the beneficial role of social interactions in facilitating young children's learning from their field trip experiences, and particularly point to the important role of peers and informal educators as key players in these social interactions.

## **2.4 Public visitors' agendas**

Learning in informal settings has been described as: highly personal to each visitor; deeply contextualised within the personal, socio-cultural, and physical contexts; and occurring over time as the visitor reflects and builds upon their visit experiences (Falk & Dierking, 2000; Rennie & Johnston, 2004). Dierking (2002) described the personal context of learning as “all that learners bring to the learning situation, their interest and motivations, their preferences for learning modalities, their prior knowledge and experience” (p. 5). Framed within their contextual model of learning, Falk and Dierking (2000) assert that this key personal context interacts with the other contexts of a learning situation such as a museum visit, to contribute to the visit experiences and learning of the individual.

Consistent with this perspective, studies conducted within the field of visitor studies have shown that public visitors, and groups of visitors (such as families), bring agendas to their visits to informal education venues (e.g., Briseno-Garzon, 2005; Falk et al., 1998; Moussouri, 2003). A visitor's agenda has been defined as “a set of desires, needs, and expectations for what the visit will hold” (Dierking & Falk, 1994, p. 61). These authors and others have also described visitors' motivations, plans, strategies, and intentions for visits as aspects of their agendas (Briseno-Garzon, 2005; Falk & Dierking, 2000; Falk et al., 1998; Moussouri, 1997, 2003). The following three subsections discuss studies that have examined first what these agendas entail, second how these agendas are formed and shaped, and third how these agendas impact on visitors' learning and experiences during their visit.

### **2.4.1 Visitors' agendas**

Several studies have investigated the personal agendas of visitors for their visits to

informal education venues by examining and reporting visitors' motivations, expectations, hopes, intentions, plans, or strategies for their visits. These studies have found that visitor agendas can include: learning or education components; leisure, recreation, and entertainment components; social components of spending time with friends and family; and exhibit-based components; among others (Adelman, Falk, & James, 2000; Briseno-Garzon, 2005; Combs, 1999; Falk et al., 1998; McManus, 1992; Moussouri, 2003). For example, Moussouri (2003) identified six visit motivations that formed a part of families' agendas for their visits to a science museum as: (a) education, (b) life cycle (parents bringing children to a venue they had enjoyed when they were young), (c) entertainment, (d) a family event, (e) place (visiting a venue that is seen to be representative of a city), and (f) practical reasons (such as weather). These visit motivations or reasons also have been reported by other studies of public visitors (in different combinations), and some studies have found other visit motivations to add to this list including broader social reasons, an interest in the subject matter, and wanting to connect with past experiences or with other places and times (Adelman et al. 2000; Briseno-Garzon, 2005; Combs, 1999; Falk et al., 1998; McManus, 1992). Several studies also have examined visitors' personal expectations or hopes (McManus, 1992; Moussouri, 1997, 2003), and intentions or goals (Briseno-Garzon, 2005) for their visits. For example, Briseno-Garzon (2005) identified that family visitors' agendas for their visits to an aquarium included three dimensions: (a) motivations, (b) intentions, and (c) strategies. Briseno-Garzon found that adults' intentions or goals for their family visits included seeing exhibits, teaching their children about the exhibits, and enjoying a family day together, among others. McManus (1992) described the results of a survey that asked visitors what they hoped to get from a visit to a science museum (the survey also asked about

their visit motivations). McManus reported that almost half of the visitors entering a science museum hoped to find out or learn about science or generally the material in the museum on their visits; almost a quarter hoped to enjoy themselves on their visits; and almost one fifth wanted to see particular exhibits that they had previously enjoyed or had heard were at the museum. The authors of these studies emphasised that these reported agenda components are by no means exclusive; visitors' agendas can include many components and their visits can be motivated by many factors (e.g., Adelman et al., 2000; Briseno-Garzon, 2005; Moussouri, 2003).

Finally, visitors' agendas have been found also to include a dimension of their plans and strategies for the visits (Briseno-Garzon, 2005; Falk et al., 1998; Moussouri, 2003). Moussouri (2003) studied the agendas of families for a visit to a science museum and found visitors' plans to vary in their degree of openness. Moussouri (2003) found some families to have open agendas that included only general plans to see the venue, and to make decisions as to what to see as the visit progressed, while other families had flexible or fixed agendas which involved increasingly predetermined plans of seeing particular exhibits and doing particular things while at the museum. Falk et al. (1998) studied visitors' agendas for a visit to a natural history museum and classified the visitor's strategies for the visit on a continuum from unfocused to moderately focused to focused, which described both the level of awareness of the visitors of what the museum had to offer and the degree of fixation on a particular goal for the visit.

The large majority of these studies examined only the agendas of adult visitors. Moussouri (1997, 2003) is one notable exception, as she studied the agendas of families for visits to hands-on museums from the perspectives of all family members, including the

children. Moussouri (1997) found that within each family group, different family members held different expectations for their visit. Significantly, Moussouri (1997) found the children (age 16 and under) in the family groups to have their own personal agendas for the visits, which concentrated predominantly on their own visit experiences. The children held expectations focused on seeing particular objects and exhibits, both that they had liked on previous visits and that they had heard about and wanted to see, and also held more general expectations of their active engagement during the visit. Only a few older children had expectations related to the subject of the museums, and very few children included learning as a part of their visit expectations. The study also found that many of the children also wanted to share their visit experiences with their family members.

These studies have shown overall that public visitors approach their visits to informal education venues with agendas that include a variety of components. Visitors' agendas can include reasons and motivations for visiting an informal education venue. Visitors have different personal or group wants, hopes, expectations, and intentions for visiting an informal education venue. Finally, visitors' agendas can include strategies and plans for how they are going to conduct the visit.

#### **2.4.2 The construction and shaping of visitors' agendas**

Visitors' agendas have been found to be dynamic and continuously constructed before, during, and after the visit as well as in subsequent visits (Briseno-Garzon, 2005; Moussouri, 2003). Moussouri (2003) found that families in her study entered the museum with motivations, plans, and expectations for the visit, and their agendas were negotiated and refined throughout the visit as the family members engaged and interacted with the exhibits.

and each other. Moussouri (1997) characterised the agenda shaping process as dynamic and cyclical, with each visit to a venue or related activity influencing the family's agenda for the next visit. Briseno-Garzon (2005) also found that families continued to adjust their agendas throughout their aquarium visits, and furthermore found that plans and agendas for future visits to the aquarium continued to be formed in the weeks after the visits.

Visitors' agendas have been found to be shaped by a multitude of factors, both before and during the visit (Briseno-Garzon, 2005; Moussouri, 1997). Factors which have been reported to shape visitors' agendas include: visitors' prior knowledge and experiences with the venue, similar venues, and the subject matter of the venue; personal interests; motivations to visit; the age of group members; and the social context of the visit (Briseno-Garzon, 2005; Dierking & Falk, 1994; Falk & Dierking, 2000; Moussouri, 1997, 2003). For example, Moussouri (1997) found that the expectations of individual family members (including the children) for their visits to hands-on museums included previous visits to the museum but also to similar museums, personal interests, and information acquired about the subject matter of the venue (such as through television) and about the venue itself through various sources.

Briseno-Garzon (2005) also found that a variety of factors shaped the families' agendas during their visits to the aquarium, and classified these factors as either intrinsic or extrinsic. "Intrinsic factors" (Briseno-Garzon, 2005, p. 110) were the emergence of interests for engaging with exhibits or learning about particular subjects. The category of "extrinsic factors" (Briseno-Garzon, 2005, p. 110) included the times of programs at the aquarium, weather, the presence of crowds, and the age, attention span, and needs of the children in the group. Moussouri (2003) used the term "museum agenda" (p. 477) to describe the aims and

expectations of the venue for visitors' experiences, and reported that the museum agenda interacts with, influences, and challenges the agendas of its visitors. In her study, Moussouri (2003) described the families' agendas as being shaped during their visits to a science centre by the nature of the exhibits in the venue, and the presence of new exhibits, for repeat visitors.

These few studies have shown that the agendas of public visitors are continuously constructed by individuals and groups both before and during the visit. This agenda construction process has been found to be shaped by a multitude of factors, including prior experiences, knowledge, interests, motivations, and social factors, as well as on-site factors relating to the venue during the visit.

#### **2.4.3 Impacts of visitors' agendas on their learning and experiences**

Multiple studies conducted with public visitors have shown that visitors' agendas impact on their visit experiences, including what they learn, how much they learn, and how they learn during their visit. For example, in her study of the agendas of families at a science centre, Moussouri (2003) concluded that family visitors' experiences with the exhibits and exhibitions in the science centre were influenced by the families' agendas, in conjunction with the museum's (science centre's) agenda. Falk et al. (1998) conducted a study that specifically examined the impact of agendas on visitors' learning at a natural history museum. This study found that the agendas visitors brought to a gems and minerals exhibition impacted on their cognitive learning from the gallery visit; visitors who declared learning and/or entertainment as important reasons for their visits were found to learn significantly more from their gallery visit than those who did not consider either of these

reasons important for their visits. In a study that examined public visitor learning from an aquarium, Falk and Adelman (2003) found that visitors' declared level of interest in the conservation subject matter of the aquarium had an impact on their knowledge gain from the visit. Only visitors who expressed at least a moderate interest in the subject matter of the aquarium were found to show significant gains in knowledge from their time at the aquarium. Furthermore, a recent study reported that visitor agendas also have an impact on the vividness of visitors' long-term visit memories (Anderson & Shimizu, 2007). Anderson and Shimizu (2007) examined the memories of visitors to a World Expo (Expo '70, Osaka, Japan), and asserted that visitor's memories of visit experiences (34 years later) were more vivid when the visitors' agendas either had been fulfilled on the visit, or remained unfulfilled from the visit.

Therefore, a connection has been made in the research literature between the agendas visitors bring to and construct during their visits to informal education settings, and their visit experiences, learning, and memories.

## **2.5 Agendas and field trips**

Field trip visits involve three separate sets of perspectives, corresponding to the three central groups of people involved in the visit: (a) the teacher, (b) the field trip venue (and its staff members), and (c) the children (Anderson, 1998). All of these individuals potentially have agendas for a field trip. Although field trips are undertaken for the learning and experiences of the children, studies have found that children have less input in making the decision to visit the venue, setting the goals for the visit, and selecting the activities on the visit, than the other individuals involved (e.g., Griffin & Symington, 1997; Olson, 1999).

The following subsections discuss the agendas and perspectives of teachers and the venues for field trips, as well as the role these agendas and perspectives play in determining the nature of field trips. Finally, studies relating to the perspectives of children of their visit experiences and the agendas of children for field trips will be discussed.

### **2.5.1 Teachers' and venues' agendas for field trips**

A number of studies have investigated teachers' agendas for taking their classes on field trips to informal education venues. The reasons and motivations of teachers to take their classes on field trips have been found to include: engaging students in multisensory, real-life learning experiences that connect with curriculum outcomes; increasing students' interests, motivation, and attitudes with the subject material; and providing students with enjoyable experiences (Anderson, Kisiel, & Storksdieck, 2006; Bowker, 2002; Davidson, 2006; Kisiel, 2005; Lucas 1999, 2000; Michie, 1998; Olson, 1999; Tunnicliffe, 1994). In a recent study, Kisiel (2005) conducted an in depth investigation of elementary teachers' agendas for taking their classes on field trips to museums and similar venues. This study found, similar to many of the others listed above, that the most common motivation expressed by the teachers for taking their students on the field trips was the connection of the field trips with classroom curriculum learning outcomes. Kisiel (2005) found that this motivation included both expectations of the students having active experiences, and learning content related to the curriculum. Tunnicliffe (1994) conducted an international study which examined the reasons that teachers took their classes on field trips specifically to zoos. Like that of Kisiel (2005), this study found that teachers had a clear curriculum focus for the field trips. However, many of the teachers in this study also identified experiences that they

considered to be special to zoos which they valued as important aspects of zoo field trips for their students; these experiences included, most importantly, seeing live animals close up and in their full size, as well as seeing exotic animals, touching animals, and learning from a teacher (educator) at the zoo.

Studies also have examined teachers' plans and strategies for field trips. These plans and strategies have been reported by studies to include: conducting pre- and post-visit activities in the classroom, using worksheets during the trip, enrolling classes in programs or tours led by venue staff or volunteers, conducting self-guided tours, and providing students with time for free exploration of exhibits (Anderson et al., 2006; Cox-Peterson et al., 2003; Davidson, 2006; Griffin & Symington, 1997; Kisiel, 2003, 2006; Lucas, 1999, 2000; Michie, 1998; Olson, 1999). Kisiel's (2005, 2006) study of teachers' field trip agendas described above also examined the strategies employed by elementary teachers during field trips with their students. Kisiel (2006) classified the teacher's field trip strategies as structured, including students completing worksheets, taking notes, and participating in guided tours and presentations, and unstructured, including asking questions and leading discussions, reading labels, orienting students to the venue space, and allowing the students to freely explore exhibits. Kisiel (2006) noted that the teachers also varied in the degree of structure of their field trip plan; he classified the teachers' plans on a scale from well defined to partly defined to undefined, which parallel the levels of openness of plans of public visitors reported by Moussouri (2003) and Falk et al. (1998).

Informal education venues also have perspectives and objectives for their field trip programs, which are communicated through their staff, exhibits, and educational programs (Bowker, 2002; Davidson, 2006; Lucas, 2000; Olson, 1999). Anderson (1998) suggested

that informal learning venues can have varied perspectives on their role in field trip experiences which can include perspectives on their provision of unique learning experiences, their support of school-based curriculum objectives, and their provision of entertaining experiences. The perspectives and agendas of the venues and their staff members may not be completely in line with the agendas of teachers for field trips, and occasions have been documented of these agendas coming into conflict with each other (Anderson, 1998; Kisiel, 2005; Lucas, 2000).

### **2.5.2 The role of teacher and venue perspectives in determining the nature of field trip experiences**

Informal learning settings have the potential to afford visitors choice and control over their own learning to create their own course and set of learning experiences (Davis & Gardner, 1993; Falk & Dierking, 2000; Rand, 2001; Wellington, 1990). This type of learning environment can promote the individual exploration of interests and intrinsically motivated learning (Csikszentmihalyi & Hermanson, 1995; Ramey-Gassert, Walberg, & Walberg, 1994). In his recent study, Kisiel (2006) found that teachers used both structured and unstructured strategies on field trips, which provided students some choice over their own learning experiences. However, other studies that have investigated what happens on field trips have found that teachers and field trip venues dictate and direct students' experiences; students often are not given the choice and control to pursue their own interests during field trips as they are engaged in activities planned for them by their teachers and the venue (Cox-Peterson et al., 2003; Griffin & Symington, 1997; Kisiel, 2003; Olson, 1999). For example, Griffin and Symington (1997) observed field trips for students in grades 5 to 10

to a natural history museum and a science centre, and reported that the teachers provided the students with specific task-based activities to complete, generally worksheets, and did not permit the students to veer away from the teacher-directed tasks to engage with exhibits of their own interest. Cox-Peterson et al. (2003) studied the field trip experiences of students in grades 2 to 8 who were enrolled in guided tours led by docents at a natural history museum, and found that most of the tours were highly structured, lecture-based, and did not give students the opportunity to make any decisions. Olson (1999) studied the field trips of six classes to a zoo, and also found that the majority of the field trips were highly structured and teacher-centred with the schedule, activities, and route of the visit determined by the teachers. Notably, Olson found that the young students (preschool and kindergarten) in her study were given even less choice and control over their field trip experiences than older students (grades 3 to 12).

### **2.5.3 Children's perspectives of their visit experiences**

A contemporary perspective in education, particularly in early childhood education, supports including children in selecting, planning, constructing, and implementing their learning activities (e.g., Edwards, Gandini, & Forman, 1998; Petersen, 2002). This child-centered educational orientation supports the generation of interest-based and emergent curricula, and values children's voices and perspectives regarding their learning (Petersen, 2002; A. Smith, Duncan, & Marshall, 2005). Consistent with this orientation, several researchers within the field of informal education have argued for the importance of considering and emphasising students' perspectives in designing and facilitating field trip learning experiences (Cox-Peterson et al., 2003; Davidson, 2006; Griffin, 1998; Griffin

2004; Griffin & Symington, 1997; Middlebrooks, 1999; Olson, 1999; Price & Hein, 1991). Middlebrooks (1999) made the following poignant recommendation to museums regarding working with children: "By paying attention to children's ideas, interests, hopes, and dreams, we in museums can build on important aspects of children's lives, knowledge, and abilities" (p. 25). Cox-Peterson et al. (2003) recommended that students be given opportunities for choice in their field trip activities to be able to build on their own prior knowledge, while Griffin and Symington (1997) and Griffin (1998) argued that students should be given the opportunity to investigate questions and areas of investigation of their own interest, instead of the questions of teachers and venue educators, on field trips.

To date, a small number of studies have examined students' perspectives of informal education venues and their visit experiences to these types of venues. Several studies of children in the elementary and secondary grades have found that children view informal education venues as places of learning (Birney, 1988; Griffin & Symington, 1997; Jensen, 1994). Studies have reported mixed findings regarding the level of enjoyment perceived by children of their visits to these types of venues. For example, Cox-Peterson et al. (2003) reported that students in their study were generally excited about their field trip tours and had especially liked the exhibits and their hands-on experiences. Davidson (2006) studied the perspectives of two classes of students (grades 7 and 8) of their field trips to zoos; she found that the students thought some aspects of their trips were fun, such as seeing animals, listening to interesting talks, and spending time with friends, while they thought some aspects were boring, including some educational talks and inactive animals. Jensen (1994) reported that the children in her study (aged 9 and 10) were mixed in their perceptions of museums as fun or boring places.

Studies of the perspectives of children in the elementary and secondary grades have reported that students place great value on having choice and control over their own learning experiences on visits to informal education venues so that they are able to follow their own interests (Birney, 1988; Davidson, 2006; Griffin & Symington, 1997; Jensen 1994). These studies found that students value being able to choose their own activities, route, and pace of movement in the venue. The findings of these studies also emphasised the importance to children of sharing their visits with others, and their desire to learn collaboratively and experience visits with their peers in particular (Birney, 1988; Davidson, 2006; Griffin & Symington, 1997; Jensen 1994). For instance, children (in grade 6) in Birney's (1988) study expressed their preference for friends as their visit companions to museums and zoos, and for talking, learning, and sharing exhibits of interest with peers. Conversely, Jensen (1994) and Griffin and Symington (1997) found that many children view teachers and teacher-directed activities (such as worksheets) as restricting their actions during the field trips, and preventing the children from choosing their own experiences. Birney also found that many students regarded adults, including parents, as being managerial and as limiting and dictating both their movement and dialogue on their visits to informal education venues. Interestingly, Griffin and Symington reported that when teachers had a clear purpose for a field trip and were enthusiastic about the experience, the students (in grades 5 to 10) held similarly positive perspectives. However, this study also found that the students were often not aware of the intended purpose for the field trips in which they participated.

The perspectives of young children about their visits to informal education venues are almost absent in the research literature (Piscitelli & Anderson, 2001). As previously described, some studies have examined young children's learning and memories of specific

field trip experiences from the perspectives of the children (see section 2.2.2) (Anderson et al., 2002; DeMarie, 2001; Fivush et al., 1984; Wolins et al., 1992). Piscitelli and Anderson (2001) and Kindler and Darras (1997) are two known studies that asked children about their perspectives of museums and their visits to museums in general. Piscitelli and Anderson reported that children aged 4 to 6 years perceived museums as positive, happy, exciting places where they can see and learn about many things. The children in this study recalled prior museum experiences that centred on large, noninteractive museum exhibits (Piscitelli & Anderson, 2001). Kindler and Darras asked children aged 4 and 5 the question, "What is a museum?" (1997, p. 126), and found that many children referred to museums as places to look at and see things (similar to Piscitelli and Anderson, 2001), although none of the children in their study described museums as places of learning. However, many of the children in Kindler and Darras' study held the perception of museums being places where behaviour is restricted, for example by having to be quiet.

In summary, these few studies have found that many children view informal education venues as places of learning, and for some enjoyment. Children have been found to value having choice and control over their own actions and activities on visits to informal education venues so that they are able to follow their own interests, as well as social interactions with others. Although several researchers stress the importance of eliciting the perspectives of children regarding their field trip experiences and incorporating these perspectives in the planning and facilitation of field trips, the voices and perspectives of children, and particularly young children, regarding their field trip experiences are not well documented or represented in the literature.

#### **2.5.4 Children's agendas for field trips**

Studies of students' perspectives suggest that children visiting informal education venues on field trips, like other visitors, have personal agendas for their visits. Children, like all other visitors, have unique personal histories of knowledge and experiences and unique personal interests (Crowley & Jacobs, 2002; DeMarie, 2001; Dierking, 2002; Falk & Dierking, 2000; Korpan, Bisanz, Bisanz, Boehme, & Lynch, 1997). Crowley and Jacobs (2002) proposed the term "islands of expertise" (p. 333) to characterise the keen interests that children form in specific topics and the extensive knowledge they develop surrounding these topics. These authors highlighted the role of children's experiences, activities, and conversations, particularly with their families, in generating and building personal and unique areas of interest and knowledge. These interests, knowledge, and experiences of children could all contribute to agendas they bring to, and construct during a field trip visit.

However, very few known studies have examined the agendas students have for field trips to informal education venues. Three of the studies that have gathered data regarding students' agendas for school field trips have reported only briefly the findings of these data. Lucas (1999; 2000), in two studies focused predominantly on the field trip agendas and experiences of teachers, briefly reported the expectations of students in grades 5 and 7 for upcoming field trips to a science centre as including the elements of both learning and having fun. Falk and Dierking (2000) reported a brief classification of grade 4 children's pre-visit personal agendas for a field trip to a zoo, based on the data from an earlier study by Balling et al. (1980). This classification included first what was classified as "child centered" (Falk & Dierking, 2000, p. 76) agendas, such as seeing particular animal exhibits, enjoying the bus ride to the zoo, and visiting the zoo gift shop, and second, elements relating to the school

aspect of the trip, including learning and meeting zoo staff. However, these authors did not support or elaborate upon this classification with any data. In a recent study, Davidson (2006) developed a model of children's perceptions of their field trip experiences that included three areas: goals, expectations, and outcomes, and then studied the perceptions of students (grade seven and eight) for field trips to zoos. Davidson reported that the student's goals (what they wanted to do) and expectations (what they thought would happen) focused on seeing animals, learning, and doing assigned animal studies at the zoo. A study by Anderson, Piscitelli, and Everett (2007) is the only one known to have described the field trip agendas of young children. Anderson et al. (2007) reported the actions and conversations of three children during field trips to an art gallery, a museum, and a science centre, and noted three agendas conveyed by children during the visits. Anderson et al. (2007) classified these agendas as 1) a "content" agenda of a child wanting to focus on a content area of interest, 2) a "mission" agenda of a child wanting to see a particular type of exhibit, and 3) a "time" agenda of a child wanting to prolong an interaction with an exhibit (p. 7). Anderson et al. (2007) suggested that some children's agendas were created before the field trip, while other agendas emerged during the field trips.

These studies serve to show that children have their own agendas for field trips; however, they do not provide a complete or rich picture of children's, particularly young children's, agendas prior to and throughout field trips. No known studies to date have examined the construction of agendas by children throughout a field trip experience, or the factors that act to shape these agendas. Additionally, and notably, no known studies have asked young children (in the early childhood years) about their field trip agendas to examine these agendas from the perspectives of the children themselves.

Furthermore, the agendas of children on field trips could have interesting and significant impacts on the children's experiences and learning from field trips, similar to what has been found regarding the agendas of public visitors. Anderson et al. (2007) described instances of competition between the three young children's agendas (described previously), and those of other field trip stakeholders (i.e., teachers, venue educators), and concluded that these agenda conflicts potentially limited the children's learning. These authors suggested that listening to the voices of children and incorporating their agendas into museum experiences may lead potentially to learning and richer experiences for the children. Falk and Dierking (2000) also have commented on this subject, describing from the work of Balling et al. (1980) that children's agendas may have affected their learning on field trips to a zoo. As described in section 2.3.1, Balling et al. (1980) found that children who were pre-oriented to the venue and activities of the field trip program before the field trip showed greater learning than children who had other types of pre-trip programs or did not have a pre-trip program (Falk & Dierking, 2000). Falk and Dierking (2000) reported that the authors interpreted these results to imply that when children were not aware of whether or not they were going to be able to engage in the activities of their personal agendas during the field trip, their attention and content learning in the field trip program suffered. Davidson (2006) concluded from her study that students' expectations influenced their learning on their field trips to zoos; she found that students who expected to complete a focused animal study on their field trip experienced deeper and longer lasting learning than students who had unfocused learning expectations for the field trip.

These studies suggest that children's field trip agendas can impact on their learning and experiences on the field trip. However, this area of inquiry is under-explored as these

studies did not focus on instances or episodes of children engaging in their agendas, and only Davidson (2006) examined positive impacts of children's agendas on their experiences and learning from their field trips. The range of impacts of children's agendas, particularly young children's agendas, on their experiences and learning from a field trip remain unexamined in the literature. Furthermore, the impacts of young children's agendas on their learning and experiences on field trips have not been examined by any known studies from the perspectives of the young children themselves.

## **3 Methodology**

### **3.0 Overview**

This chapter provides a detailed description of the study's methodology, theoretical framework, and methods. The study's research questions are identified first, followed by an overview of the methodological approach and design of the study. The next four sections describe the philosophical framework and beliefs of the study, the study's context, the study's participants, and the researcher's role in the field. Subsequently, the data collection and analysis procedures are outlined. The chapter concludes with discussions of the trustworthiness and ethical considerations of the study.

Throughout this chapter, and in the remainder of the thesis, the term "the researcher" refers to the author Bethan Lawson, and the term "the research assistant" refers to Dr. David Anderson in his role in assisting in data collection.

### **3.1 Research questions**

This study investigated two research questions: 1) What are the agendas of young children for a school field trip to a zoo, and what factors shape these agendas?; and 2) How do the agendas of young children impact on the children's learning and experiences during a field trip to a zoo?

### **3.2 Methodological approach and study design**

A qualitative methodology was employed in this study (Merriam, 1998), which sought to understand the meanings and experiences of children with respect to a field trip.

Consistent with a qualitative approach, the study examined children's experiences within the natural setting of a field trip program, and sought to understand their meanings and experiences in an in-depth, holistic manner (Creswell, 1998; Merriam, 1998).

The study used an interpretive case study design (Merriam, 1998). The study consisted of the description and interpretation of a single case (Merriam, 1998). The case was a field trip to a zoo experienced by children within a single primary school class. The case was bounded by both time and place (Creswell, 1998); it consisted of the complete field trip program as experienced by the participating children starting with the pre-visit activities and orientation in the classroom, continuing with the on-site zoo field trip program, and finishing with the classroom-based post-visit activities. As outlined in section 2.5.4, children's agendas for field trips are currently an under-examined area of inquiry and therefore the variables in the research questions are not yet fully identified. Consequently, the study was exploratory and sought to generate emergent understandings regarding the children's field trip agendas, experiences, and learning (Merriam, 1998).

Furthermore, the study employed an instrumental case study approach in which the selected case was studied in order to gain an understanding of the issues in the research questions (Stake, 1995). The case study design recognised and emphasised the contextual nature of a school field trip, and the study sought to provide a descriptive and interpretive account of both the context and the contextualised participant meanings of the particular field trip case (Merriam, 1998; Yin 2003, chap. 1).

### **3.3 Philosophical framework and beliefs**

#### **3.3.1 Philosophical and theoretical framework**

The study was located in the philosophical paradigm of constructivism (Guba & Lincoln, 1994; Ponterotto, 2005; Schwandt, 1998). The study took a relativist ontological and subjectivist epistemological stance which acknowledges that there exist multiple realities that are constructed by and between individuals (Guba & Lincoln, 1994; Ponterotto, 2005; Schwandt, 1998). Therefore, the study sought to understand the constructed realities of the participants of the study and understand the meanings the children brought to and constructed from the experience of a field trip to a zoo. The study sought to give a voice to the young children in the study, and sought to understand the children's views of their field trip agendas, experiences, and learning (Lincoln & Guba, 2000; Schwandt, 1998; A. Smith et al., 2005).

The study was grounded in the learning theory of social constructivism which views learning as an active process of meaning making by individuals within social groups (Driver et al., 1994; Gergen, 1995; Vygotsky, 1978). This theory contends that learning is a social, contextualised process whereby learners are introduced and enculturated into the ways of knowing and practices of a social community through social interaction, shared activities, and discourse (Cobb, 1994; Driver et al., 1994; Gergen, 1995; Lave & Wenger, 1991). Learning is described as coming from interaction and guided participation with the individuals and resources of a community (Cobb, 1994; Driver et al., 1994; Lave & Wenger, 1991). Equally, the study recognised the importance of the individual processes of internal construction of knowledge and meaning making as integral parts of the learning process (Cobb, 1994; Driver et al., 1994; Vygotsky, 1978). Consistent with these theories that view

learning as an active process of meaning-making, the study espoused a multidimensional definition of learning including the cognitive, affective, emotional, aesthetic, and social dimensions (e.g., Anderson et al., 2002; Schauble et al., 2002).

The study was grounded also in the contextual model of learning created by Falk and Dierking (2000) which highlights the importance of the personal, socio-cultural, and physical contexts in an individual's learning experiences. This model emphasises the importance of not only what happens during a visit to an informal education venue in terms of a visitor's interactions with the physical and social environments, but also what visitors bring with them into the visit in terms of their personal interests, motivations, prior experiences, and knowledge (Falk & Dierking, 2000).

### **3.3.2 View of children**

The view of children espoused by this study is that they are competent social actors (Harcourt & Conroy, 2005). This view recognises children as autonomous subjects who actively take part in, are impacted by, and impact upon, the social, cultural, and physical contexts in which they live; it appropriately recognises children as having their own perspectives, views, opinions, and interests independent from those of their family members, teachers, and other adults in their lives (Brooker, 2001; Harcourt & Conroy, 2005; Edwards, Gandini, & Forman, 1998; Robinson & Kellett, 2004; A. Smith et al., 2005).

This view of children points to the importance of including children as active participants in studies of their lives and experiences (Robinson & Kellett, 2004). This view also draws attention to the need to listen to children's voices and perspectives in research that is concerned with understanding their experiences. In the past, some researchers and authors

have focused on the incompetencies of children (as described, for example, by A. Smith et al., 2005), and difficulties in eliciting their perspectives (e.g., Hatch, 1990). This study supported the view of many current researchers that it is not only possible, but important to listen to and highlight the voices of children regarding their own experiences (Brooker, 2001; Darbyshire, Schiller, & MacDougall, 2005; Piscitelli & Anderson, 2001). When engaged with supportive research practices and procedures, children can provide information competently about their own experiences that cannot be discovered from any other sources than the children themselves (Brooker, 2001; Darbyshire et al., 2005; Gollop, 2000; Kellett & Ding, 2004; A. Smith et al., 2005). As stated by Kellett and Ding (2004), "The more children are given a primary research voice, the less adults will be required to 'interpret' their worlds" (p. 172).

### **3.4 Context**

The case study's context was a primary class field trip to a school workshop program at the Toronto Zoo. A zoo context was selected purposefully because it was believed that it would contribute to a rich data set of young children's field trip agendas, and hence would help to maximise what could be learned from the study and contribute to understanding the issues in the research questions (Merriam, 1998; Stake, 1995). Animals and zoos are an important part of the worlds of young children (e.g., DeMarie, 2001; Korpan et al., 1997; Piscitelli & Anderson, 2001); hence, the children in the study were likely to have prior knowledge of, experiences with, or interests in zoos and animals, all of which could contribute to them constructing rich personal agendas for a zoo field trip, and rich impacts of these agendas. The Toronto Zoo was selected as the field trip venue context for the study as

it is a well-respected zoo that offers a variety of educational programs. A school workshop program was selected as the context for the study in order to generate understandings regarding children's experiences with an informal educator-led field trip program.

### **3.5 Study participants**

The study's case class was a grade 1 and 2 (combined) class. A single class of children was selected for the study so as to be able to collect in-depth, contextual data regarding the field trip case in order to come to understand the case and the participant meanings in a holistic manner. A public school class was selected purposefully so as to allow potentially for reader and naturalistic generalisations to other school classes. The class teacher volunteered for the study to take place in her class. The class teacher was known to include field trips into her pedagogical practice and planned to integrate the zoo field trip into the classroom-based learning, which the researcher believed would contribute to a rich contextual situation for the study's case and consequently rich understandings emerging from the study.

All the children in the class, and one parent/guardian of each child, were invited to participate in the study. Consent and assent to participate in the study was received for 17 children in the class, although it ended up logistically impossible to collect data with one of these children; therefore, 16 children constitute the participants in the study. Twelve parent/guardians (of the participating children) participated in the study by completing questionnaires or being video recorded on the field trip. The classroom teacher and the zoo educator who led the field trip program also participated in the study. Although the children's agendas, experiences, and learning were the primary issues in this case study, the

collection of data from multiple participants was important in order to generate a rich contextual description and interpretation of the case.

### 3.6 Researcher role

The researcher recognised that how she portrayed herself in the field would affect the case and the findings of the study, and therefore consciously considered her role in the classroom community and the relationships she developed with the participants (Angrosino & Mays de Perez, 2000; Gollop, 2000).

The researcher took on an active role of participant observer in the classroom while conducting this study (Fine & Sandstrom, 1988; Merriam, 1998). In this role, the researcher spent considerable time in the field getting to know the participants and collecting the data. The researcher chose to make a role and identity for herself in the classroom community as a researcher and volunteer (Angrosino & Mays de Perez, 2000). She was introduced to the children as a student researcher who was studying their field trip to the zoo and as a “scientist” (in the sense that she was knowledgeable and interested in the classroom subject of science). In her participation role, the researcher was involved in such classroom activities as joining in learning activities and helping the children with their classroom work (she also led a book-related activity with some of the children when asked to do so by the teacher). It was also important in this study that the children view the researcher as a *learner* who was genuinely interested in learning from, and about, them and their perspectives (Gollop, 2000; Graue & Walsh, 1998, chap. 6). Therefore, the researcher emphasised to the children throughout the data collection that she was interested in understanding *their ideas* and what *they think* about the field trip.

Fine and Sandstrom (1988) suggested that when studying children, adult roles can be classified on two dimensions: (a) the extent of positive contact with the children, and (b) the extent of authority over the children. The researcher strived to develop a friendly rapport with the children in order to encourage the positive relationships necessary to generate rich data (e.g., Gollop, 2000; Hatch, 1990; Kellett & Ding, 2004). The researcher also strived to minimise any perception of her authority over the children; the children called the researcher by her first name, and the researcher strived to not be involved in any classroom management of the children. These actions could have helped reduce any perceived power differential between the children and the researcher, and encourage the children to take on their roles in the study as “the knowledge holders, the permission granters, and the rule setters” (Graue & Walsh, 1998, p. 57).

### **3.7 Data collection**

The study included seven data collection procedures. Consistent with the case study approach, data were collected from multiple sources and through multiple methods in order to come to understand the case in an in-depth manner (Merriam, 1998; Yin, 2003, chap. 4). As young children can use many different modes of representation to express their ideas (e.g., Kendrick & McKay, 2004; Edwards, Gandini, & Forman, 1998), the multiple data collection methods also allowed the study to document the children’s views and perspectives in a variety of ways. All data collection procedures were intended to be as unobtrusive as possible to the participants, and to interfere as minimally as possible with the normal classroom and field trip activities.

1. Pre-visit observations: The researcher observed a pre-visit activity session (1 hour) and the pre-visit orientation (35 minutes) led by the teacher in the classroom; both occurred two days before the field trip. The researcher created and used an observation recording sheet that included columns for recording both observations and researcher comments (Billman & Sherman, 1996, chap. 2) (see Appendix A). She recorded her observations of the participants' actions and verbal expressions, as well as the activities and setting (consistent with the suggestions of Merriam, 1998). The researcher made small suggestions to the classroom teacher to help design the pre-visit activities, when she was consulted by the teacher (for example, helping the teacher make sheets of the characteristics of the different animal phyla to put at a science activity centre).
2. Questionnaires: One parent/guardian of each child was asked to complete a questionnaire that sought to elicit background information regarding the children's prior experiences, interests, and knowledge of zoos and animals (see Appendix B). The questionnaire included a combination of closed and open-ended questions to elicit both specific information and more open descriptions. The questionnaires were sent home with the participating children for completion by their parents/guardians.
3. Pre-visit interviews and drawings: During the two days before the field trip, the researcher conducted individual, face-to-face interviews with the children regarding their agendas for the field trip. The research assistant participated in some of the pre-visit interviews in a supportive interviewing role. The interviews took place in a quiet area of the children's classroom and ranged in length from approximately 5 to 20 minutes. The interview protocol was semi-structured which allowed the researcher to be flexible and responsive to the participants in ordering the questions and in probing the children's

responses during the interviews (see Appendix C for interview questions) (Bernard, 1994, chap. 10; Merriam, 1998). The interview protocol included a drawing component to provide the children with an active, concrete activity to engage in during the interview, and to help the children to feel at ease (Gollop, 2000; Kortessluoma, 2003; Parkinson, 2001). This component also provided the children with an alternative mode for representing their ideas and expressing their thoughts and perspectives more fully (Cameron, 2005; Kendrick & McKay, 2004). The interviews were audio recorded for subsequent analysis, and the researcher and research assistant made brief notes during and after the interviews.

4. Video recordings: During the field trip the researcher and research assistant video recorded the normal engagement in the field trip of eight of the children, in order to document the children's experiences during the field trip. These eight children were selected purposefully (as recommended by Merriam, 1998) based on the following four criteria: (a) variety in their expressed pre-visit personal agendas; (b) the children's verbal communication skills (as these children were engaged in longer post-visit interviews than the other children); (c) teacher recommendations regarding personalities that would work well together in a group; and (d) the teacher's request of children being grouped with their own parents/guardians. These children were assigned into two groups of four children, each of which was led by a parent/guardian chaperone. Video recording focused only on these two groups so as to try to exclude any children, parent chaperones, zoo staff, and other zoo visitors who were not participants in the study from the recordings. The two researchers also used audio recorders to document observational field "notes" during the field trip.

5. Post-visit drawings: The day following the field trip the children were asked to complete a post-visit drawing activity during class time that probed their thoughts regarding their field trip experiences (this activity was specifically a data collection procedure for the study). The prompt for this activity was: “What did you enjoy most about your trip to the zoo?” This activity lasted approximately 20 minutes. This activity provided the children with a non-verbal mode with which to communicate and represent their ideas and experiences, and was designed to encourage them to express a range of their thoughts, experiences, and emotions (Cameron, 2005; Kendrick & McKay, 2004; Piscitelli & Anderson, 2001).
6. Post-visit interviews: The researcher conducted individual, face-to-face interviews with the children regarding their agenda-related experiences and learning on the field trip as well as the meanings represented in their post-visit drawings. The interviews were conducted over the two school days following the field trip and were between 5 and 15 minutes each in length. Similar to the pre-visit interviews, the interviews took place in a quiet area of the children’s classroom; the interview protocol was semi-structured (see Appendix C for interview questions); the interviews were audio recorded; and the researcher made brief notes during and after the interviews. The interview protocol for the eight children who were video recorded was extended to include a playback component of short segments of video recordings from the field trip. These segments constituted what the researcher and research assistant had identified as appearing to be important episodes of the individual child’s agenda-related experiences. This protocol allowed the researcher to probe the children’s thoughts and memories regarding the nature of these episodes, a technique that has been reported to generate rich insights from

children's responses in previous studies (Flewitt, 2005; Graue & Walsh, 1998, chap. 6; Hatch, 1990; P. K. Smith, Smees, & Pellegrini, 2004).

7. Post-visit observations: Two school days after the trip, the researcher observed a post-visit activity session facilitated by the teacher in the classroom (35 minutes). Similar to the pre-visit observations, the researcher used the observation recording sheet (see Appendix A), and recorded her observations of the participants' actions and verbal expressions, as well as the activities and setting.
8. Document review: The researcher examined the animal- and zoo-related published books that were used in the classroom during the pre- and post-visit activities, or that were specifically mentioned by the children in their interviews (where attainable).

### **3.8 Data analysis**

#### **3.8.1 Transcription**

The researcher transcribed the audio recordings of the interviews in near entirety (only sections of interviews that were not pertinent to the research questions were not transcribed, for example questions from the children about the audio recorder). These transcriptions included both the words stated in the interviews as well as notes about the intonation, pauses, and inaudible sections in the interviews. The transcripts were synchronised with notes made during and after the interviews regarding children's actions during the interviews (e.g., a gesture to show the size of an animal). The researcher viewed the video recordings multiple times and made extensive notes of the actions and verbal expressions of each of the eight children who were video recorded. The researcher transcribed the video episodes that provided evidence for the research questions. The

researcher transcribed in entirety the audio-recorded notes made by the researcher and research assistant during the field trip.

### **3.8.2 Analysis**

Data analysis proceeded in three stages. In the first stage, the researcher addressed the pre-visit data set: the pre-visit interview transcripts, drawings, and observations, the parent/guardian questionnaires, and relevant documents. This pre-visit data set was examined to generate the findings regarding the pre-visit agendas of the children and the factors that shaped these pre-visit agendas (research question 1). In the second stage, the researcher addressed the during-visit data set: the video recordings, video recording notes and transcripts, and the field notes taken during the field trip. This during-visit data set was examined together with the pre-visit data relating to the eight children who were video recorded on the field trip to generate the findings regarding the agendas of the children during the field trip and the factors that shaped these agendas (research question 1). In the third stage, the researcher addressed the post-visit data set: the post-visit interview transcripts, drawings, and observations. This post-visit data set was examined together with the pre-visit and during-visit data sets to generate the findings relating to the impact of the children's agendas on their learning and experiences (research question 2). Throughout the data collection and analysis processes, the researcher wrote memos which were included in the data analysis, as suggested by Miles and Huberman (1994) and Merriam (1998). Overall, the interview, observation, drawing, and video data were considered the main data sources in this analysis, while the questionnaires and documents played a supporting role (consistent with the suggestions of Merriam, 1998).

Each stage of the data analysis started with the chunking and coding of the data set. The data were divided into chunks of monothematic pieces of data that each were meaningful on their own, as suggested by Miles and Huberman (1994) and Merriam (1998). The data chunks were then coded; the codes were generated in an inductive manner, yet the coding process was guided by the issues in the study's research questions (consistent with the suggestions of Miles & Huberman, 1994).

The analysis continued with a process of category construction in which the researcher searched within the data chunks for emergent collections of instances or regularities that formed distinct categories (Merriam, 1998; Stake, 1995). Specifically, the researcher constructed categories through the constant comparison method, as described by Merriam (1998), wherein each chunk of data was compared with other chunks of data. This comparison was conducted both within the data set relevant to each participating child (e.g., comparing a chunk of data from a child's pre-visit interview and a chunk of data relating to the child from the pre-visit observations), and among the participating children (e.g., comparing chunks of multiple children's pre-visit interviews relating to their anticipated feelings on the field trip). The categories were constructed in light of the issues in the study's research questions, yet also to reflect the meanings and voices of the participating children, as suggested by Merriam. In addition to category construction, some direct interpretation of single instances was conducted when the researcher found meaning in individual episodes, as described by Stake (1995). The researcher then searched among the constructed categories and instances for patterns and links (consistent with the suggestions of Creswell, 1998; Merriam, 1998; Miles & Huberman, 1994; and Stake, 1995) to reveal and develop emergent relationships and themes.

Lastly, the researcher generated a rich description of the case as well as descriptive and interpretive findings and assertions regarding the emergent categories, unique instances, relationships, and themes that address the research questions (Creswell, 1998; Merriam, 1998; Stake, 1995). The researcher did not draw generalisations with these findings; it is left to the reader to construct naturalistic or reader generalisations and apply the findings and conclusions of this study to other cases and situations (Merriam, 1998; Stake, 1995).

### **3.9 Trustworthiness**

The trustworthiness of the study was considered at every stage of the research process. Efforts to establish the trustworthiness of the study included: prolonged engagement of the researcher in the field; triangulation; clarification of the researcher's perspective; and reporting a thick, rich description of the case and its findings.

First, the researcher spent considerable time in the field getting to know the participants and then collecting data over time so as to try to understand the case as fully as possible, as suggested by Creswell (1998) and Merriam (1998). The researcher spent five half-days in the classroom before the data collection began acting as a volunteer and interacting with the participants during their normal classroom activities; she then acted as a participant observer in the classroom over several days of data collection. The slow introduction of the researcher into the classroom activities was carried out to help the participating children become comfortable with her, and allow the time for the formation of the trusting, friendly rapport that is necessary to gather rich data and come to understand the perspectives of participants, particularly from interviews (Brooker, 2001; Fontana & Frey, 2000; Gollop, 2000; Hatch, 1990; Kellett & Ding, 2004).

Second, triangulation of data methods and sources was considered in data collection and analysis, consistent with the case study design (Stake, 1995; Yin, 2003, chap. 4). The study included multiple methods of data collection with the children to achieve triangulation of methods, including interviews, drawings, observations, and video recordings.

Furthermore, data were collected and examined from multiple sources, such as parent/guardian questionnaires, inclusion of the teacher and zoo educator in the observations of classroom and field trip activities, and review of relevant documents, to understand a more holistic picture of the case and the children's contextual situations (Merriam, 1998; Stake, 1995; Yin, 2003, chap. 4).

Third, the researcher endeavoured to recognise and clarify her beliefs, perspectives, and assumptions that were relevant to the study, as recommended by Merriam (1998). The researcher's personal values, as well as the philosophical and theoretical framework, beliefs, and views with which she approached this study, are described in sections 1.6 and 3.3 of this thesis, respectively. These descriptions are intended to help the reader understand the perspectives and potential biases from which the researcher approached and interpreted the case (Creswell, 1998; Merriam, 1998).

Lastly, the researcher generated a thick, rich description of the case, its context, and of the findings and conclusions arising from the study. This description is provided in this thesis so as to enhance the opportunities for reader and naturalistic generalisations (Creswell, 1998; Merriam, 1998; Stake, 1995).

### **3.10 Ethical considerations**

The ethical dimensions of the study were considered carefully in all stages and aspects of the study. The following ethical procedures and practices were established and implemented to respect and protect the study's participants, their rights, and their privacy.

Consent forms were used to ask for the informed consent to participate in the study of one parent/guardian of each child, the classroom teacher, and the zoo educator. Informed consent also was sought from the parents/guardians of the children for their children's participation in the study, as the children were too young to give consent themselves. Importantly, and consistent with the study's view of children, the child participants were asked for their assent to participate in the study. By recognising the children's rights to make their own decisions regarding their participation in the study, the study recognised the children as competent, active, empowered participants in the research process (Harcourt & Conroy, 2005). The children were informed of the purpose and procedures of the study in a whole class discussion with the researcher and teacher before the study began. The researcher had generated a student assent form to read aloud at this time that included information about the data collection methods and what would be done with the information gathered, and informed the children that they could choose whether or not to be a part of the study, or to stop being a part of the study, at any time. Informed assent was a continuously negotiated process, and the participating children were asked for their verbal assent to participate in the data collection at the beginning of each interview and before being video recorded (as recommended by Brooker, 2001; Flewitt, 2005; and Haverkamp, 2005). The children who did not give assent to participate in the data collection, even though their parents/guardians provided consent for their participation in the study, were not included in

the study. Furthermore, open lines of communication were established between the researcher and the participants (as suggested by Flewitt, 2005); the participants were invited, and given the opportunity, to ask questions of the researcher at all times.

The identities of the participants remained strictly confidential to the researchers outside of the study setting (and inside the setting to the extent possible); the participants are only referred to in this thesis using pseudonyms. There were no known risks or harm to the participants for participating in this study as it did not include sensitive items and was minimally intrusive into the lives of the participants. Yet, the participants shared personal information in the study regarding their perspectives, experiences, and knowledge relating to the field trip, and permitted their actions to be observed and recorded. Therefore, a degree of risk was present for the participants as all possible outcomes of data collection and reporting cannot be predicted (Merriam, 1998).

Finally, the researcher implemented an ethic and attitude of care in developing respectful relationships and in interacting with the participants of the study (Haverkamp, 2005). The needs, perspectives, and comfort of the participants were considered by the researcher at all times in the field. The researcher considered her responsibility to enact ethical practices, behaviour, and attitudes paramount in all stages of the study (consistent with the perspectives of Fontana & Frey, 2000; Graue & Walsh, 1998, chap. 4; and Haverkamp, 2005).

## 4 Findings

### 4.0 Overview

This chapter outlines the major findings from the study. It starts with a detailed description of the case and continues with the findings in five main areas: (a) the children's pre-visit agendas, (b) the children's agendas during the field trip, (c) the factors shaping the children's agendas prior to the field trip, (d) the factors shaping the children's agendas during the field trip, and (e) the impact of the children's agendas on their learning and experiences on the field trip. Quotes from the participants, reproductions of the children's drawings, and descriptions from observational notes and video recordings are included to support the findings. These stories, words, and images are incorporated to give voice to the child participants, to help readers to understand the meanings and perspectives of the children, and to provide the readers with vicarious experiences with the case and its context.

The following operational definitions were generated to communicate the study's findings.

*Desires and hopes:* Things a child wants to see or do, is looking forward to seeing or doing, or is hoping to see or do on the field trip. In the pre-visit data set, the children's verbal declarations or relevant responses to questions of what they wanted, hoped, or looked forward to seeing or doing on the field trip were classified as desires and hopes. The children's pre-visit drawings were also considered as expressions of desires and hopes, as the children were asked to draw what they were looking forward to at the zoo. In the during-visit data set, the children's indications through verbal and non-verbal means that they wanted to see or do something were classified as desires.

*Expectations:* Things a child thought would be present at the zoo or thought was going to happen on the field trip, but that he or she didn't describe specifically as something they were wanting, hoping, or looking forward to seeing or doing.

*Subgroup children:* The group of eight children who were video recorded during the field trip is referred to as the subgroup children.

The following frequency terms were applied when referring to the prevalence of a finding among the 16 children in the case:

*Several:* between 4 and 8 children

*Majority:* between 9 and 15 children

*All:* all 16 children

The following frequency terms were applied when referring to the prevalence of a finding within the subgroup of eight children:

*Some:* between four and seven children

*All:* all eight children

#### **4.1 Case description**

The case of this study is a field trip to the Toronto Zoo by sixteen children in a grade 1 and 2 (combined) school class. The class was a part of an elementary school located in a large urban centre. The school was located in a higher socio-economic status neighbourhood and the students in the school were from diverse cultural and ethnic backgrounds. The teacher of the class, Ms. Pepper<sup>2</sup>, was an experienced primary teacher, who included field trips as a part of her pedagogical practice.

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<sup>2</sup> All names used in this thesis are pseudonyms

The field trip to the zoo was integrated well into a classroom science unit on animals. Ms. Pepper facilitated both pre- and post-visit activities relating to animals and the seasonal changes in animals, and also led a pre-visit orientation with the children. In the pre-visit observation session, the researcher observed the children working on science activity centres designed by Ms. Pepper concerning animals, types of animals, animal body parts, and the changes animals undergo through the seasons, which the children worked on in the days leading up to the field trip. These activities included drawing an animal or tree in each of the four seasons, creating a collage from magazine pictures of patterns found in nature or taxonomic categories of animals, and creating a drawing of an animal and labelling its body parts, among others. While completing these activities, the children were observed working independently, discussing their ideas and work with their peers, asking questions, and referring to books for information (placed at the centres by Ms. Pepper).

Two days before the field trip, Ms. Pepper facilitated a comprehensive pre-visit orientation with the children. She gathered the children in the central meeting area of the classroom and led the children in a discussion and activities to prepare them specifically for the field trip. Ms. Pepper had attached seven cardboard clocks showing different times of the day and seven written labels of activities of the field trip to the flip-chart at the front of the meeting area. Through a questioning process, Ms. Pepper and the children matched the clock times and labelled activities to build the schedule of the field trip day. The parts of the day's schedule discussed (as well as their respective times) were: 9:15 leave school, 10:00 arrive at the zoo, 10:15 start workshop, 11:30 animal tour, 12:00 lunch, 12:30 animal tour, and 1:30 leave the zoo. Ms. Pepper questioned the children during the activity to ensure that they understood the parts of the schedule. She also described the behaviour she expected of

the children on the field trip both in terms of rules and her expectation that they would learn and find out about animals on the field trip. Ms. Pepper emphasised to the children during this pre-visit orientation that the field trip was for learning, and made statements such as "We're going as scientists...you're there to find out more about animals." She also placed an emphasis on the role of the zoo educator, Janet, in the field trip. Ms. Pepper explained that Janet is an expert, and that she was going to teach them about animals, the characteristics of animals, and the changes of animals with seasons. Ms. Pepper then led the children in a predictive brainstorming activity, asking the children: "What do you think we're going to see at the zoo?" Many children offered answers which Ms. Pepper recorded on the flip-chart.

The pre-visit orientation was followed by an activity in which the children made maps of the zoo. Ms. Pepper read a fictional book to the children on the subject of zoos and zoo maps, and then asked the children to make a map of what the children thought the zoo was going to look like when they visited. The children then moved to their desks and worked busily to make their maps, drawing and labelling zoo entrances, paths, and animals, among other aspects of their perceptions of zoos.

The field trip program in which the children were enrolled at the zoo was a full-day student workshop program that was led by a zoo educator and focused on the curriculum topic of the seasonal changes in animals. The program included a presentation by the zoo educator, two animal tours of zoo exhibits, a game activity, as well as lunch. The morning animal tour followed a specific route and included particular exhibits. The second animal tour of the program was designed to be more flexible, and Janet and Ms. Pepper discussed prior to the field trip what types of animal exhibits to visit during this second tour.

On the day of the field trip, the children and the five parent/guardian chaperones gathered in the classroom and Ms. Pepper divided the class into chaperone groups she had created the day before, having taken into consideration the grouping requests of the researcher for the video recording. Ms. Pepper assigned the chaperones each a group of three or four students who they were responsible for managing throughout the day; the parent/guardian groups each included their own children.

The children, teacher, chaperones, researcher, and research assistant boarded the bus and rode to the zoo; at the zoo, they were greeted outside the gate by Janet, the zoo program educator. Janet led the children to a zoo classroom that contained several small exhibits of live animals, such as snakes and a turtle. Tables were set up around the perimeter of the room and a variety of animal artefacts, such as skulls and furs, were placed on the tables. The children sat in chairs while Janet led them in a 35-minute presentation on the topic of the changes animals undergo with the seasons. In this presentation Janet introduced specific vocabulary to the children and showed the children many photographs and other visual aids. She involved the children in her presentation by asking them questions throughout. During this presentation, the researcher and research assistant positioned the two video cameras in the room to focus on the subgroup of eight children being video recorded (one on a tripod, one held by the researcher).

At the conclusion of the presentation, the children were divided into two half-class tour groups; Janet led one tour group while a zoo volunteer led the other. These tour groups left the classroom and proceeded to participate separately in guided tours of exhibits in the zoo. The subgroup children, who were video recorded, were all assigned to Janet's tour

group<sup>3</sup>. Janet's tour followed a pattern of stopping at particular exhibits at which she encouraged the children to move up to the exhibit fence or window to look at the exhibit animals. Janet provided information about each of the animals, particularly focused on the changes the animals undergo between seasons; she asked the children many questions in her talks, and the subgroup children also asked many questions of her. The tour group moved between exhibits on the zoo paths; the subgroup children walked, ran, and skipped between exhibits, sometimes clustered into peer groupings or walking and talking with Janet or other adults on the trip. The researcher and research assistant moved with the tour group, and tried to each video record the activities of their assigned four subgroup children; however, it was not possible to capture the activities of all four children with each camera at all times due to the constant movement of the children.

Janet's tour first visited an exhibit of birds of prey, and then proceeded to a tiger exhibit, followed by a series of large outdoor animal exhibits including kangaroos, yaks, and polar bears. The tour then moved into a zoo pavilion and proceeded to visit exhibits in four areas in the pavilion. The first area contained exhibits of snakes, fish, beavers, lizards, otters, and frogs, among others. The main exhibits in the second area were alligators, turtles, and fish; the third area contained a variety of marine exhibits, including a baby octopus and sea anemones, as well as several types of small monkeys, and snakes. On the way out of the pavilion, the tour passed through a large bird exhibit area in which the birds were flying free among the visitors.

Janet's tour group then returned to the classroom to meet up with the other half of the class to eat lunch. Once the children had finished eating their lunches they were free to

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<sup>3</sup> The routes taken by the two half-class tour groups were planned to be similar in this morning animal tour. However, the exact route, activities, and exhibits visited by the other half-class tour group were not documented.

examine the animal artefacts in the classroom and talk with Janet. Janet led the children in a game after lunch on the subject of animals living through the winter season; in this game the children were each given a card with a picture of an animal on it, and they were challenged to search around the room to find a card that matched with their animals' wintertime activities. After the game, the two half-class tour groups headed out separately again into the zoo for a second animal tour<sup>4</sup>. In the afternoon tour, Ms. Pepper joined Janet's tour group, whereas she had been with the other half of the class in the morning. Janet's afternoon tour started with a monkey exhibit, and then moved to two zoo pavilions: first, the tapir and rhinoceros pavilion, and then a large pavilion that contained a variety of exhibits of crocodiles, turtles, birds, fish, snakes, lizards, and finally orangutans. The tour group then walked back to the bus to rejoin the other tour group, and the class returned to the school.

Upon arrival in the classroom, Ms. Pepper engaged the children in a discussion of their field trip experiences. She first asked the children "What did you like at the zoo?", and then asked the children to tell her "one thing you learned from [Janet]"; she called on several students to answer each question. The day following the field trip, the children completed the post-visit drawing activity. The school day following that, Ms. Pepper engaged the children in a session of post-visit activities. Ms. Pepper read a book to the class about the growth and development of plants, and led the children in a discussion of the needs of living things. The children then were assigned activities to complete; the activity for the grade 1 children focused on the needs of living things, and the activity for the grade 2 children focused on the strategies used by different animals they had seen at the zoo for changing with the seasons. The children worked on their assignments at their desks, and the children,

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<sup>4</sup> The route, activities, and exhibits visited by the other half-class tour group on this afternoon animal tour were not documented.

especially the older children, engaged in much conversation regarding the animals at the zoo and asked many questions to Ms. Pepper and the researcher.

## **4.2 Children's pre-visit agendas**

The pre-visit data set, consisting of the pre-visit interview transcripts, drawings, and observations, the parent/guardian questionnaires, and relevant documents, was examined for all 16 children in the case to generate the findings in this section. Through this analysis, it was found that the children had pre-visit agendas which each included a multifaceted set of desires and hopes for the field trip, affective elements, and, for some, expectations for the field trip. The multifaceted nature of the children's agendas is exemplified in the following vignette of the main desires and hopes in the agenda of one child, Angela.

### **Vignette**

Angela is an energetic girl who enjoys drawing pictures. Angela expressed that she was looking forward to seeing a cheetah on the field trip; her pre-visit drawing of what she is most looking forward to seeing is also of a cheetah (see Figure 4.1), and she explained that her picture shows, "This is me and I'll be watching it." She expressed her expected affective response to seeing the cheetah in the speech bubble in her drawing, "Wow Cool." She also expressed, "I hope we get to touch some of the animals." She thought she was going to feel "excited" on the field trip because her family member was attending the trip as a chaperone, and she was going to get to spend time with friends.

**Figure 4.1** Angela's pre-visit drawing - Angela watching the cheetah



Each child held a unique set of desires and hopes, and expectations for the field trip, which indicates the individual and personal nature of the children's agendas for the trip. However, several broad categories of elements within the children's agendas were found and are described in the following sections: exhibit-based elements, social elements, other activities at the zoo, affective elements, and expectations for the field trip. Each child's pre-visit desires and hopes, and affective agenda elements are summarised in Appendix D, Table D1.

#### 4.2.1 Exhibit-based elements

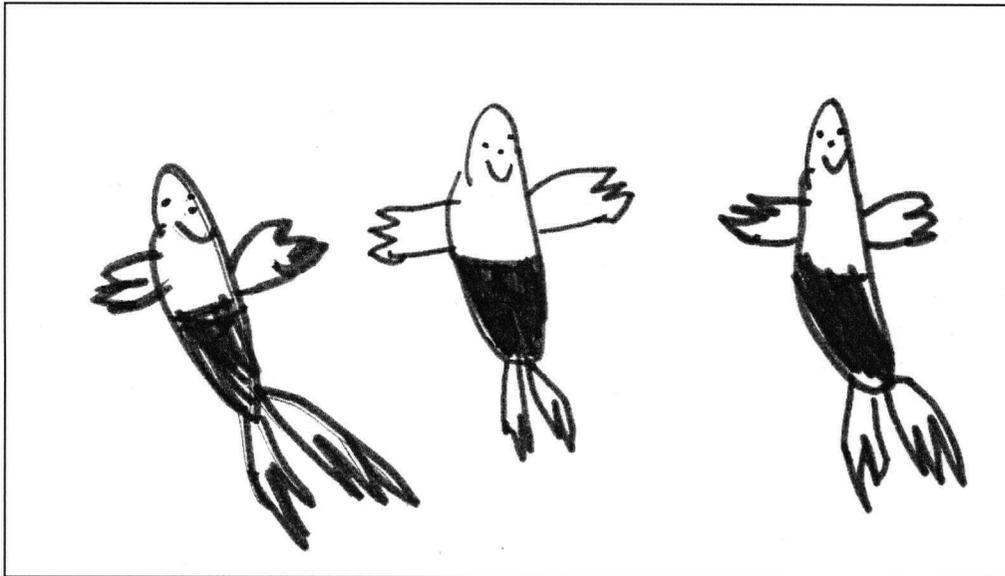
Seeing or interacting with animals was the most universal field trip agenda element among the children. The zoo animal exhibits were a part of three types of desires and hopes for the field trip: (a) to see specific animals, (b) to have a more interactive experience with animals, and (c) generally to see many animals.

All of the children declared desires and hopes to see specific animals on the field trip during their pre-visit interviews. The children referred to their desires and hopes involving specific animals in terms of seeing, looking at, or watching the animals, or simply stated the animal as what they were looking forward to with no specific action mentioned. Animals were also the main subject of all but one of the children's pre-visit drawings of what they were looking forward to doing on the field trip. The majority of the children expressed their agendas of seeing one or more specific animals in both verbal expressions and their drawings (see Appendix D, Table D1). For example, Mark declared a desire to see the monkeys on the field trip in his pre-visit interview and then proceeded to draw monkeys as the subject of his pre-visit drawing (see Figure 4.2):

BL: I was hoping that you could draw a picture of what you're really looking forward to doing at the zoo. Do you think you could do that with the markers? Yeah?... What are you really looking forward to doing at the zoo on the field trip?

Mark: Seeing the monkeys.

**Figure 4.2 Mark's pre-visit drawing - monkeys**



In another example, in his pre-visit interview Matthew talked extensively about looking forward to seeing gorillas on the field trip while making his drawing that depicts a gorilla (see Figure 4.3), and then also declared his hope to see polar bears:

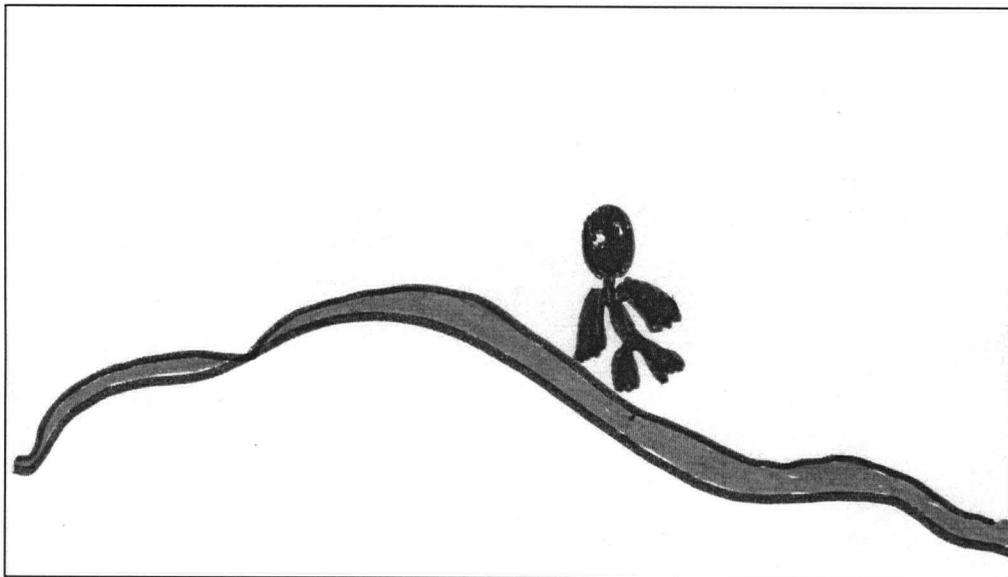
BL: And so you showed in your picture, lovely picture, that you're really looking forward to, um, seeing the gorillas.

Matthew: [made a sound of agreement]

BL: Is there anything else that you really hope that you get to do on the field trip tomorrow?

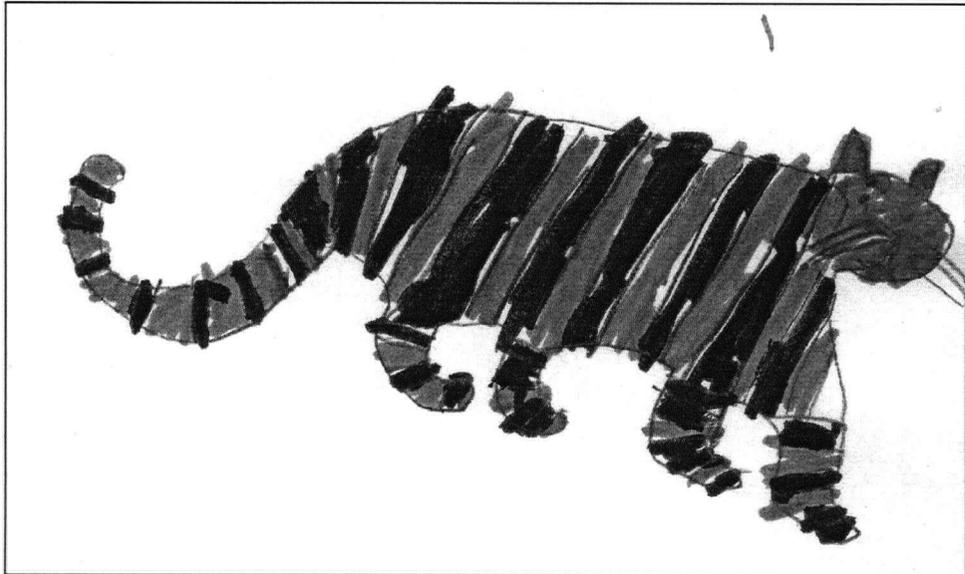
Matthew: I hope that we get also to see polar bears.

**Figure 4.3 Matthew's pre-visit drawing - a gorilla**



In addition to expressing agendas of seeing particular animals in their pre-visit interviews and/or drawings, several children also referred again to their agendas of seeing a particular animal during the pre-visit orientation and/or included them on their map during the pre-visit map drawing activity. Chris provided the fullest example of this type of situation. Chris stated in his pre-visit interview that he was looking forward to seeing a tiger on the field trip and created a drawing of a tiger (see Figure 4.4). Additionally, during the pre-visit orientation session he contributed an answer of “tigers” to the class discussion regarding what they thought they were going to see at the zoo, and then the first animal he drew on his zoo map was a tiger. The children’s multiple expressions regarding these agenda elements served to convey the importance of these agenda elements to them, and suggested that these elements were persistent in their thoughts.

**Figure 4.4 Chris' pre-visit drawing - a tiger**



The children's agendas of seeing specific animals included a variety of animals; overall, the children had desires and hopes to see a total of 16 different types of animals on the field trip. No two children had desires and hopes to see the exact same list of animals; each child had an individual set of animals that he or she desired or hoped to see on the field trip (see Appendix D, Table D1). On the other hand, some of the animal exhibits were included in the agendas of several children. Most notably, half of the children named the tiger as one of the animals they desired or hoped to see on the field trip, making it by far the most important single animal exhibit among the agendas of all the children.

Additionally, several of the children expressed desires or hopes that involved experiences with animal exhibits that were more interactive than looking at the animals. These experiences included feeding animals, touching the animals, and walking through pavilions in which the animals are not in cages. For example, Sean made a drawing during his pre-visit interview of the two things he was most looking forward to at the zoo, one of

which was the birds in the pavilions (he was also looking forward to the lions) (see Figure 4.5). In his pre-visit interview, he described his drawing to the researcher:

BL: So what pavilion is this?

Sean: The bird pavilion.

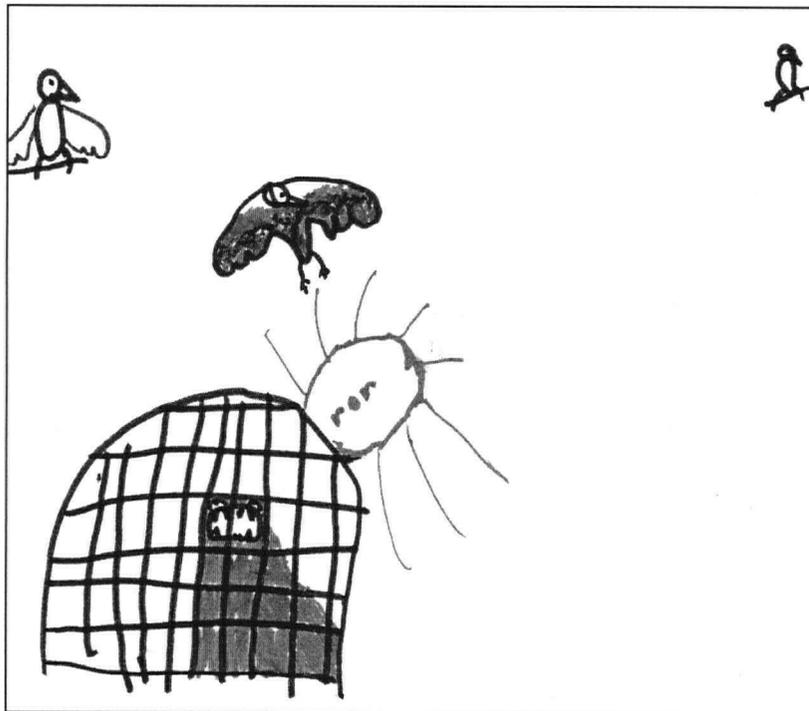
BL: And what happens there?

Sean: A lot of birds.

BL: Are the birds inside of cages?

Sean: No, they're just... [no ending]

**Figure 4.5 Sean's pre-visit drawing - birds in a pavilion (and a lion)**



Finally, several of the children declared desires and hopes of seeing or looking at animals in general on the field trip. These children specifically expressed in their pre-visit interviews that they were looking forward to seeing, or hoping to see, many or all of the

animals at the zoo on the field trip. However, each of these children did also specify one or more particular animals which they were looking forward to or hoping to see at the zoo. For example, Mary and the researcher had the following interchange during her pre-visit interview, after she finished her drawing of a tiger (which she was looking forward to seeing):

BL: Is there anything else you're looking forward to doing on the field trip?

Mary: Seeing [inaudible word] all the animals.

BL: Like what animals? What other animals?

Mary: All of them.

BL: All of them! You're interested in all the animals?

Mary: Yeah.

Rebecca, as well as expressing desires and hopes to see a giraffe and alligators, declared the following hope for the field trip:

Rebecca: I hope that I get to see every animal there. That's what I hope to do.

The prevalence of animals, whether in general or of particular types, in the children's desires and hopes for the field trip shows the importance to the children of engaging with the animal exhibits at the zoo. Overall, the children had desires and hopes to see specific animals at the zoo, and several had desires or hopes to see generally the animal exhibits at the zoo, while several others had desires or hopes to engage with the animals in more interactive ways.

#### 4.2.2 Social elements

The majority of the children's pre-visit agendas included social elements. These children included spending time with peers and/or parents/guardians as desires and hopes for the field trip day (see Appendix D, Table D1).

Several of the children expressed desires or hopes to spend time with a particular peer, group of peers, or friends in general, on the field trip. This is exemplified by Sean, who named two peers as people with whom he hoped to spend time on the field trip and gave the reply, "cause they're my friends," as a reason why he wanted to spend time with them. Two children coupled their expressed peer social agendas with comments of liking to work with other children. Of these two, Matthew provided the more in-depth explanation for his hope to work with a friend, which was for the benefit of sharing experiences together, as he explained in this excerpt from his pre-visit interview:

BL: Is there anyone that you really hope that you get to spend time with on the field trip?

Matthew: Maybe we can be in partners and look at different kinds of animals at the zoo.

BL: Do you like working in partners?

Matthew: Yeah.

BL: Yeah? Why, why do you like working in partners?

Matthew: Because we can both do something and we can both like share what we're doing. Like someone can tell the other person what to do and the other person can [inaudible word].

BL: And is there anyone you'd like to work with at the zoo?

Matthew: Maybe [Chris].

BL: Why [Chris]?

Matthew: He's my friend.

The parents/guardians of five of the children attended the field trip as chaperones, and four of these children expressed desires and hopes to spend time on the field trip with their significant adults (the researcher unfortunately did not ask the fifth child the probe regarding social agendas in her pre-visit interview - see Appendix C, pre-visit interview question 5). During their pre-visit interviews, these four children all named their parent/guardian first as the person with whom they desired or hoped to spend time on the field trip before they named any other individuals. Additionally, three of these children told the researcher that their parent/guardians were coming on the field trip spontaneously in their pre-visit interviews, before the researcher asked them any questions regarding the social aspects of the field trip. Two of these three children specifically expressed feelings of excitement about spending time with their parent/guardian. For example, Rebecca described excitedly her hope of spending time with her chaperoning mother during her pre-visit interview:

Rebecca: My mummy's coming with us on the field trip. [there was not a relevant prompting question before this statement]

[later in the interview]:

BL: And is there anyone that you hope that you're going to get to spend time with?

Rebecca: Mum! [excitedly] She's coming on the field trip with me.

BL: And you're excited about that? [responding to the excitement in Rebecca's voice]

Rebecca: Mm hm! [an affirmative sound]

A third child, Kate, said in her pre-visit interview that hugging her chaperoning mother was what she was most looking forward to on the field trip; she was unique amongst all the children in discussing this social agenda element before mentioning any other field trip

agenda elements, and also in making this interaction with her mother the subject of her pre-visit drawing (see Figure 4.6):

BL: What is it that you're most looking forward to doing?

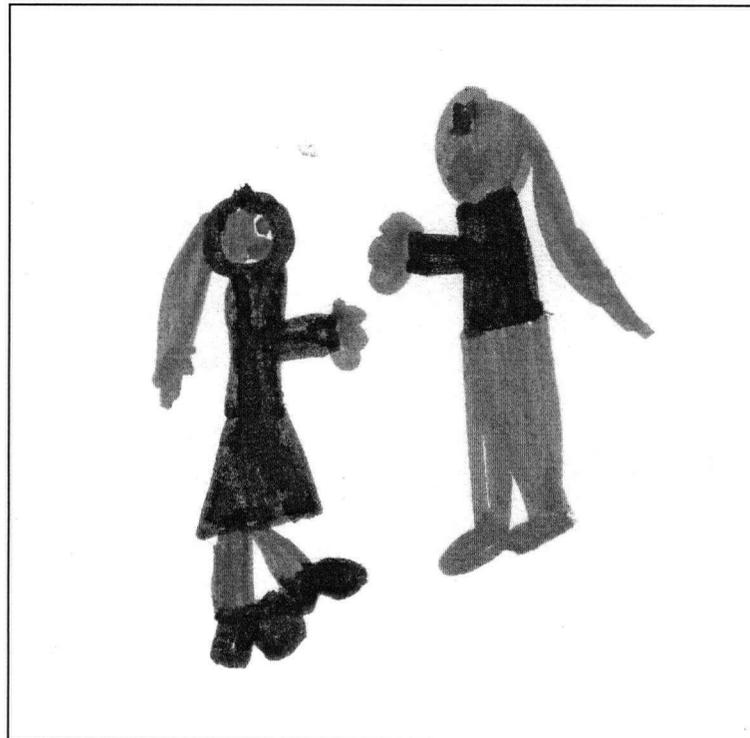
Kate: Um, hugging my mum at the zoo.

[later in the interview, after she had completed her drawing]

BL: So tell me about this drawing.

Kate: Um, this is me and my mum going to hug each other.

**Figure 4.6 Kate's pre-visit drawing – Kate and her mother**



These children indicated, then, that spending time with their parent/guardians was an important part of their field trip agendas. Conversely, none of the children whose

parents/guardians were not attending the trip mentioned the parent/guardian chaperones attending the field trip in the pre-visit data set.

A final note regarding social pre-visit agenda elements is that one child, uniquely, named the classroom teacher, the zoo educator, and the researcher as people with whom she hoped to spend time on the field trip. These other adults were not mentioned by any of the other children as a part of their pre-visit agendas for the field trip.

The inclusion of social interactions by the majority of the children in their field trip agendas suggests that they consider the social aspect of field trips as important. These children desired and hoped to spend time with people of importance to them on the field trip, namely their peers and/or their parents/guardians.

#### **4.2.3 Other activities at the zoo**

Several children had desires and hopes to engage in non-exhibit-based activities at the zoo on the field trip. These activities included visiting the zoo's water park, going on the zoo's automated rides, and going on a zoo bus ride with baboons jumping on top of the bus (these activities were named by one child each). Two children expressed that they were looking forward to eating at the zoo.

#### **4.2.4 Affective elements**

The children spoke positively of how they were going to feel on the field trip. The majority of the children used the words "happy" or "excited" to describe how they thought they were going to feel when they arrived at the zoo on the field trip day. Furthermore, two children said the field trip was going to be "fun", while one said that he thought he was going

to feel really good at the zoo (see Appendix D, Table D1). The following interchange in Jessica's pre-visit interview exemplifies the feelings of the children:

BL: ...when you arrive at the zoo, how do you think you're going to feel?

Jessica: Happy.

BL: Happy? Why?

Jessica: Because I like to have fun at zoos.

The children provided a variety of reasons for their expectations of positive feelings on the field trip day. These reasons included seeing the animals, liking going to zoos, and spending time with friends or parent/guardians on the field trip (at least two children cited each of these reasons).

Furthermore, the children's expressions about the field trip throughout the pre-visit data set had an overall positive tone; none of the children made expressions of apprehensions or negative expectations for the trip.

#### **4.2.5 Expectations**

The majority of the children also described a variety of aspects of the zoo and its exhibits, or of the field trip day that they expected or thought would be present or would happen. The children did not describe these aspects as things they specifically wanted, hoped, or looked forward to seeing or doing, but nonetheless seemed to expect these things for the field trip. In data analysis, it was difficult at times for the researcher to discern the children's thoughts regarding these expectations. The nature of the pre-visit interview questions, the children's responses, and the topics themselves made it difficult at times to distinguish what the children expected would happen on the field trip, what they desired and

hoped for the field trip, and what they merely were recalling having done and enjoyed on past visits to zoos and zoo-like venues. However, the following findings constitute the children's pre-visit expectations for the field trip that could be interpreted from the data.

Several of the children expressed general expectations in their pre-visit interviews that they were going to see many animals on the field trip. Two of these children also identified several specific animals that they might see, or thought they'd see, on the field trip. Additionally, during the pre-visit orientation, several of the children identified specific animals that they thought they might see at the zoo which they had not expressed as desires or hopes for the field trip. Furthermore, during the pre-visit interviews when asked to explain what happens when you visit a zoo, all of the children included animals in their answers (or for the one child who had not previously been to a zoo, when asked to explain what she thought people do when they visit a zoo) (see Appendix C, pre-visit interview question 4). The majority of the children's answers to this question included that there are many animals at the zoo to see; additionally, the majority of the children's answers included one or more specific animals, many of which were not animals that they had expressed as desires or hopes for the field trip. Therefore, the children appeared to have expectations that zoo experiences include different types of animals.

In addition, several of the children who had previously visited the Toronto Zoo described specific aspects of this zoo in their pre-visit interviews in a manner that suggested they took it for granted that these elements of the zoo would be present when they visited on the field trip. These implied expectations consisted of such elements as the presence and locations of particular animal exhibits, footprints on the zoo pathways, and a large globe at the entrance to the zoo (these elements were named by at least one child each).

Finally, several of the children expressed expectations regarding aspects of the field trip day, schedule, and activities, in their pre-visit interviews. Two of the children expressed expectations of the social arrangements of the field trip, specifically that they would be placed into partners or groups with peers for the field trip day and that they would be led in these groups by a parent/guardian chaperone. Two other children expressed expectations of eating at the zoo (independent of the two children who expressed desires or hopes to eat at the zoo). Notably, only one child referred to an expectation of participating in the field trip workshop program in his pre-visit interview. This one child, Sean, accurately described several key parts of the visit's schedule, as was explained to the class by Ms. Pepper during the pre-visit orientation session. In response to a question in his pre-visit interview regarding when he thought he was going to see birds on the field trip, he stated:

Sean: In the animal tour.

DA: In the animal tour, when is that going to happen?

Sean: It's going to happen after when we do a workshop. So it'll be the second thing we do, after we, third thing we do, because first we're going to leave school then we're going to arrive at the zoo and then we're going to start a workshop and then we're going to go on the animal tour.

### **4.3 Children's agendas during the field trip**

The subgroup of eight children who were video recorded during the field trip appeared to construct some agenda elements during the field trip. The during-visit data set, consisting of the video recordings, video recording notes and transcripts, and field notes taken during the field trip, was examined in conjunction with the data in the pre-visit data set relating to the eight children in the subgroup to generate the findings in this section. Only

the data from the subgroup of eight children were examined in generating these findings. Through this analysis, it was found that the subgroup children continued to create and express agendas during the field trip. The agenda elements that emerged during the field trip included newly formed desires of what the subgroup children wanted to see and do as the field trip progressed. The following sections consider these agendas in two categories: (a) exhibit-based elements, and (b) social elements.

#### **4.3.1 Exhibit-based elements**

The animal tour components of the field trip program involved the group looking at, and talking about, many animal exhibits. The subgroup children all appeared to show and express immediate desires to engage with particular animal exhibits that were part of the animal tours. Many of the children also expressed verbally or acted on desires on the field trip of seeing other animal exhibits which they had not yet seen on the trip, or which they passed by without stopping at on the tours. These exhibit-based agendas will be considered in terms of the subgroup children's engagements with exhibits, movement to exhibits, and indications of wanting to see an exhibit (see Appendix D, Table D2 for summary).

First, all the subgroup children appeared to show desires to engage with particular exhibits at which Janet, the zoo educator, stopped them on the animal tours; each subgroup child showed these types of desires for many exhibits stopped at on the tours. The subgroup children were deemed to express a desire to be engaging with an exhibit when they were observed making one or more of the following types of behaviours and expressions: looking intently into an exhibit for a considerable period of time without being distracted; listening to, or talking with Janet at the exhibit; making verbal comments about the exhibit or talking

about the exhibit with peers or chaperones; pointing into the exhibit; mimicking the animals in the exhibit; looking at the exhibit's text panel; staying behind and continuing to look at the exhibit after the group had moved on; and making affective verbal exclamations of joy, surprise, or interest at the exhibit. For example, Jessica showed a desire to look at the tapir exhibit on the field trip; she looked intently into the exhibit the entire time that the tour group was stopped at this exhibit, during which Janet was talking about the animal, without being distracted. In another example, Mary and Natalie showed a desire to look at an exhibit of lizards, since they continued to look into the exhibit for half a minute longer after Janet had moved the tour on to the next exhibit.

Second, all of the subgroup children appeared to show and follow desires to engage with exhibits along the route of the animal tours, but that Janet was not stopped at with the tour group. Specifically, some of the subgroup children were observed on at least one occasion to stop at an exhibit en route to the next exhibit during the animal tours. In these situations, an exhibit appeared to catch the attention of a subgroup child, and the child stopped and looked at the exhibit while the tour group continued on to another exhibit with Janet. In some instances the child looked at the exhibit alone, while in others another subgroup child (or children) would also stop with the first. As an example, Natalie stopped to look at an exhibit of scorpions mounted in the wall while she and the group were moving to an exhibit of lizards. She looked into the exhibit intently, craning her neck upwards to get a better view into the exhibit, before moving on to catch up with the group. Furthermore, some subgroup children were observed leaving the exhibit at which Janet had stopped the tour to look at one or more other exhibits in the area, on their own or with other children; these subgroup children were observed showing this behaviour on at least one occasion each.

For example, Jessica was seen to leave the group at the rattlesnake exhibit and move first to look at an exhibit of turtles behind her, and then at a large text panel about snakes, before rejoining the group. As another example, Matthew and Chris were seen to move away from the group on multiple occasions to look at other animal exhibits, often together, and on more than one occasion to look at a few exhibits before rejoining the group. For instance, when the group was looking at the rattlesnake exhibit, Matthew and Chris both left the group to look at an exhibit of fish next to the rattlesnakes, and then proceeded to explore another unidentified exhibit, a snake exhibit, and a turtle exhibit together in succession before rejoining the group. In these situations of choosing to move to look at an exhibit on their own (or with peers), the subgroup children were deemed to be expressing and acting on their own agendas to look at particular exhibits at the zoo. The majority of these situations were observed inside the zoo pavilion visited during the morning animal tour; in this pavilion there were many exhibits, and Janet stopped the group at only some of the exhibits located along the tour path.

Third, during the field trip, on a few occasions, children in the subgroup expressed desires to see particular exhibits that they had not yet seen through words or actions. Specifically, some of the subgroup children were heard expressing a desire to see a particular type of animal during the field trip by specifically stating they wanted to see it, asking where the animal was, or saying they didn't get to see it with the group (each of these types of expressions was heard from at least one subgroup child). For example, Matthew expressed his desire to see the gorilla exhibit (which was a part of his pre-visit agenda, as described in section 4.2.1) during the afternoon of the field trip by stating directly to Janet, "I want to see a gorilla." Additionally, all the subgroup children appeared to express desires to see

particular animal exhibits which they had not yet seen on the field trip through verbal and/or non-verbal responses to indications at the zoo that they were on their way to see the animal, on at least one occasion each. These observed responses were in the form of an excited comment, enthusiastic running or skipping towards the exhibit of interest, and/or an excited facial expression. A universal example of this situation occurred when, after a few minutes of walking towards the tiger exhibit, the subgroup children neared the exhibit area and they all were observed running up to the exhibit window. In a more specific example, Natalie expressed her desire to see the tigers (which were also a part of her pre-visit agenda) in both verbal and non-verbal ways. When Janet declared: "We're on our way to see a tiger," Natalie's eyes lit up, she drew in her breath and exclaimed, "Tiger," and upon nearing the tiger exhibit ran up to the exhibit window (with all the other subgroup children). Some, but not all, of these comments and actions were observed in situations regarding animals that the subgroup children had declared as parts of their pre-visit agendas. These verbal and behavioural expressions were deemed to be expressions of desire to see a particular animal exhibit, and appeared to show the children's agendas to see and engage with these specific animal exhibits during the field trip.

In summary, the subgroup children are believed to have expressed exhibit-based agendas that were constructed during the field trip.

#### **4.3.2 Social elements**

The subgroup children were found to express and enact social agenda elements during the field trip. They were deemed to show desires to engage in social interactions with

their peers, Janet (the zoo educator), and the parent/guardian chaperones as a part of their field trip experiences (see Appendix D, Table D2 for summary).

#### **4.3.2.1 Interacting with the zoo educator**

All of the subgroup children had the opportunity to interact with Janet, the zoo educator, during the field trip presentation and animal tours. The many interactions observed between some of the subgroup children and Janet during the field trip suggested that interacting with Janet was an important part of these children's agendas during the visit.

All of the subgroup children were observed to spend time listening to Janet on the field trip. All of the subgroup children appeared to be listening to Janet during her presentation in the classroom, and also at many exhibits throughout the animal tours insofar as they were standing with her and the tour group and paying attention to an exhibit while she was talking about it. Although it was not possible to know if the subgroup children were listening actively to Janet in all these situations, on occasions subgroup children were observed showing their attentiveness to Janet by looking at her while she was talking. Additionally, some of the subgroup children were seen offering answers to the questions that Janet asked when talking. One child, Sean, in particular was observed answering her questions on multiple occasions. For example, in an episode at the polar bear exhibit Sean jumped in to answer several of Janet's questions:

Janet: Do you guys know what colour skin a polar bear has?

Sean: Brownish white.

Janet: Not his fur, the colour of his skin underneath his fur.

Sean: Pink. Black.

Janet: It's black, that's right. Have you ever touched the road in the summertime, is it hot or cold?

[other children answered]

Janet: The road.

Sean: Hot.

Janet: The black road is hot. What about the sidewalk? It's cooler than the road. So that black skin on the polar bear actually helps to keep him very very warm in the wintertime.

Sean: Because black absorbs the [heat].

Janet: That's right.

Furthermore, some subgroup children were observed to initiate and extend interactions with Janet during the animal tours by asking her questions and sharing their knowledge and stories with her. These children were observed asking Janet one or more questions, seeking information while engaging with an exhibit or while walking between exhibits. Some of these children also were observed making multiple comments specifically to Janet at, and between, exhibits. These comments included statements of their knowledge about animals and stories of their prior experiences with animals. Jennifer represents the most pronounced example of this social agenda during the field trip, as judged by the frequency of her questions. She asked questions to Janet at a large number of the exhibits visited on the animal tours, such as, "Why is he sleeping?" at the polar bear exhibit, and, "Is he nocturnal?" at the rhino exhibit. Jennifer also made a large number of comments to Janet while looking at the exhibits; overall, she was observed asking a question or making a comment to Janet at 23 of the exhibits or other stopping points during the animal tours. As another example, although Jessica was not observed to initiate many conversations with Janet, she shared and discussed her knowledge about grizzly bears with Janet in the

following episode which occurred as she was moving to the polar bear exhibit. Jessica moved to walk next to Janet, and initiated the following conversation:

Jessica: My project is about grizzly bears.

Janet: Is it? Ahh.

Jessica: [inaudible words] grizzly bears here.

Janet: Well we have grizzly bears here and they get a thicker coat and extra fat and then they sleep for a while, but if it's a mild day they'll wake up [inaudible words].

Jessica: I never knew the, they, yes, and I heard that they wake up, when they're hibernating they could wake up easily.

Janet: Yes they can. If you had a rock concert in the forest, you could wake all the bears up...

In their actions of listening to Janet, responding to her questions, asking her questions, and sharing with her their knowledge and experiences, the subgroup children were deemed to be demonstrating a desire to interact with her on the field trip. This social agenda element could possibly also have involved a learning element as the subgroup children's interactions with Janet were centred around the seeking and sharing of knowledge.

#### **4.3.2.2 Interacting with peers**

All of the subgroup children interacted with peers on the field trip. The subgroup children engaged in a few different types of interactions with each other from sociable walking and talking together, to sharing an exhibit experience together, to moving with each other away from the group to experience other exhibits of interest.

Some subgroup children were observed to spend sociable time with peers by walking, talking, or playing small games together in pairs or small groups between exhibits at

different points as they moved through the zoo. For example, at the beginning of the afternoon animal tour, Mary and Natalie ran, talked, and smiled together while playing a made-up game when walking to the first exhibit. The positive feelings and enjoyment of the children during this time together were evident. Through these actions, the children were deemed to have desires to spend time sociably with their peers during the field trip.

All of the subgroup children shared their experiences at exhibits with their peers on multiple occasions throughout the field trip. Each of the subgroup children were observed to engage actively at exhibits with one or more peers by showing the behaviours of standing together at the exhibit windows, talking with each other, pointing things out to each other, and/or making exclamations to each other of things they saw. Some of the subgroup children showed these behaviours more frequently than the others. As an example, Jennifer and Mark shared two extended exhibit experiences together in this way, standing next to each other and pointing and conversing together. For instance, at the crocodile and turtle exhibit, Jennifer was seen to point into the exhibit and exclaim, "Hey look, look [Mark]," and then a moment later, "Look at that little turtle, [Mark], [Mark]..." At the orangutan exhibit, Mark was observed to turn his head, smiling, to Jennifer and exclaim, "Ewww! She's eating his fur." Matthew and Chris represent an interesting example of having social agendas as the two of them were observed repeatedly sharing exhibits together, at times away from Janet and the group; two specific episodes were observed on the video recordings of one of them calling or pulling the other over to see something of interest, reciprocally sharing their interests.

Therefore, overall, the subgroup children were deemed to have social agendas to share experiences and spend time with peers on the field trip as judged by their sociable and/or exhibit-sharing interactions with their peers. The varying frequencies of these

behaviours among the children suggest that these agenda elements were more important to some subgroup children than others.

#### **4.3.2.3 Interacting with parents/guardians**

Due to the manner in which the children were grouped, it was only possible to video record two children whose parents/guardians were chaperoning the trip; these two subgroup children both were observed interacting with their parent/guardian on the field trip day. One of these children, Mary, was deemed to show that sharing the field trip experience with her chaperoning mother was an important agenda element for her during the trip by the many interactions she had with her mother throughout the field trip. They spent time walking together between exhibits and shared conversations about the exhibits. For example, at the birds of prey exhibit Mary was seen to step back away from the exhibit fence on three separate occasions to make comments to her mother; on the third occasion, she was heard saying, "Mom we saw them." These small moments initiated by Mary show that she was interested in sharing this exhibit experience with her mother.

On the other hand, the other subgroup children whose parents/guardians were not in attendance at the zoo did not appear to hold strong social agendas of interacting with the parent/guardian chaperones on the trip. These children did not seek or have as many interactions with the chaperones as did those who shared the parent-child relationship with the chaperones, and many of the interactions they did have were management-oriented.

## **4.4 Factors shaping agendas prior to the visit**

The pre-visit data set was examined for all 16 children in the case to generate the findings in this section. Through this analysis many links were found in the pre-visit data set between the children's agenda elements and other ways in which the children related to these agenda elements in terms of their previous experiences, personal interests, and prior knowledge. The following six factors appeared to shape the children's agendas prior to the field trip, and are discussed in the sections below: (a) prior visit experiences, (b) prior indirect experiences, (c) never having seen a specific type of animal before, (d) personal interests in animals, (e) prior knowledge and conceptions about animals, and (f) school-related activities. Two or more of these factors appeared to shape each child's agenda, and some of the elements within the agendas (see Appendix D, Table D3 for examples). The factors are discussed individually for the purposes of describing the importance of each in shaping the children's agendas.

### **4.4.1 Prior visit experiences**

All but one of the children said that they had been to a zoo prior to the field trip in their pre-visit interviews. The one child who said that she had not been to a zoo before said she had been previously to a petting zoo. The majority of the children had been to the Toronto Zoo prior to the field trip, although several of them said that they had been to other zoos and other zoo-like venues (venues with exhibits of live animals such as animal theme parks). These previous visits were mostly made with members of their families, but a small number were taken with friends or camp groups.

A strong link was found between the children's agendas for the field trip and their previous experiences at zoos and zoo-like venues. The majority of the children's desires and hopes for the field trip contained elements that the individual children had experienced on previous visits to a zoo or zoo-like venue. Specifically, one or more of the exhibits and zoo activities that the majority of the children expressed as desires or hopes for the field trip were exhibits or activities they also described having seen or done on a previous visit to a zoo or zoo-like venue in their pre-visit interviews. Additionally, several of the children said that they had previously seen or done all of the exhibit-based and activity-based desires and hopes that they expressed for the field trip on prior trips to zoos or zoo-like venues. For example, Neil expressed that he was looking forward to seeing a tiger at the zoo verbally and in his drawing, and he also hoped to see cheetahs and lions. He described having seen all three of these types of animals on his previous visits to two different zoos (his description of one "zoo" sounded more like it was an animal theme park); he specifically recalled seeing the tigers sleeping and that he had really liked the cheetahs on these visits.

Additionally, several of the children had desires or hopes to see an animal on the field trip that they also said they had enjoyed most or best on a prior visit to a zoo in their pre-visit interviews. For example, Mark had a desire to see monkeys on the field trip (as described in section 4.2.1), and expressed in his pre-visit interview that he had enjoyed the monkeys the most on his previous visit to the zoo with members of his family:

BL: What did you enjoy doing when you went to the zoo?

Mark: The monkeys.

[Then, later in the interview]

BL: What did you see at the zoo when you went with your cousins?

Mark: Monkeys and giraffes and tigers and lions and [inaudible word] um gorilla, and  
hmm some fish. And, hmm, that's it.

BL: That's it? And out of all of those animals, which one did you enjoy seeing the  
most?

Mark: Monkeys.

In addition, several of the children related specific memories or detailed descriptions  
of their previous experiences at the zoo that were connected with their expressed field trip  
desires and hopes, in their pre-visit interviews. For example, Erin, whose pre-visit agenda  
included seeing a giraffe, related a memory of seeing a giraffe that was pregnant on a visit to  
the Toronto Zoo with her mother:

Erin: when I went to the zoo with my mum I saw tigers, lions, a giraffe, and elephant.  
The giraffe mom was having a baby so I got to [inaudible word] that too.

In another example, Ruth, who said that she was looking forward to eating lunch on the field  
trip, related a detailed memory of eating lunch in one of the Toronto Zoo's restaurants with  
her family:

Ruth: 'cause in the restaurant there's a speaker thing and you can see a bunch of zebras  
running around, well not exactly running around, I mean they're walking around.

BL: Oh, okay. You can see those from the restaurant? Oh, neat. Did you see them  
when you were eating lunch? Oh, okay.

Ruth: And guess what.

BL: What?

Ruth: Inside the restaurant I had these hot dogs and I don't like hot dogs [laughed].

The connection between elements of the children's agendas and specific, memorable experiences on previous visits to zoos supports the role of the children's prior experiences with zoos and zoo-like venues in shaping their field trip agendas.

In summary, the children's prior visit experiences appeared to be a factor from which the majority of the children drew when forming their desires and hopes for the field trip. The children held desires and hopes to engage in experiences on the field trip which they had done in the past, which they had enjoyed, and which stood out in their memories.

#### **4.4.2 Prior indirect experiences**

The majority of the children described indirect experiences they had previously with animals or the zoo in their pre-visit interviews; these experiences were not obtained from visits to a zoo, but instead from other experiences in their everyday lives. These experiences included reading books, watching television shows, having toys, referring to the Chinese lunar calendar, and using the internet. Although it was not always clear where these indirect experiences had taken place, several of these children specifically said that these experiences were at home, while other experiences (i.e., watching television) can be presumed to have taken place at home or in other non-school-based aspects of their lives. All 11 of the parent/guardian questionnaires that were completed also indicated that their children were exposed to one or more of books, television shows, movies, computer games, or other indirect experiences with animals and zoos at home, confirming that these types of experiences are a part of the socio-cultural worlds of these children.

For the majority of the children, a connection could be drawn between one or more of their desires or hopes to see a specific animal on the field trip and a prior indirect experience

they had with the animal. Three children directly named the prior indirect experience as the reason that they were looking forward to or hoping to see a particular animal, or the reason they were interested in the animal. For others, the researcher drew a link between the child's desire or hope to see an animal on the field trip and the child's description of a prior indirect experience with this animal.

Reading books was a source of several of the children's indirect experience with the zoo animals they desired or hoped to see on the field trip; these children said that they had read about one or more of the particular animals they desired or hoped to see in books. Mary, for example, started her pre-visit interview by eloquently stating that one of her favourite activities at school was reading:

BL: What do you like about reading?

Mary: About animals.

BL: What types of things do you read?

Mary: Um, non fiction stuff. Like, um. Like, I like reading my encyclopedia and stuff like that.

Later in the interview, after naming tigers as one specific type of animal that she was looking forward to seeing at the zoo, she described her prior experience with learning about tigers from a book:

BL: What do you know about tigers?

Mary: Um. They live in the forest sometimes, they live in the wild... The mothers hunt, not the fathers. Um, and the mothers only take care of babies for I think one or two year and then they leave them.

BL: And how did you learn all of that about tigers?

Mary: Um, in a book.

Two other sources of indirect experiences with animals that appeared to help shape elements of children's field trip desires and hopes were television shows (two children) and toys (one child). For example, Diane hoped to see penguins on the field trip; she said in her pre-visit interview that she had never seen one before, but she had seen them on television. In another example, Matthew explained that he wanted to see polar bears on the field trip because he had a toy polar bear at home in this excerpt from his pre-visit interview:

Matthew: Um, I hope that we get also to see polar bears.

BL: Oh, tell me about that.

Matthew: Big and white and if they were in the arctic they have these special paws so they don't slip on it.

BL: Oh. And why do you hope you'll see them?

Matthew: Because, cause they look really friendly, and, and I have one big toy that's a, uh, polar bear.

Three of the children made an interesting link between their interest in tigers and their being born in "the year of the tiger", in reference to the Chinese lunar calendar. Two children directly gave this link as their reason for wanting to see a tiger on the field trip, and a third child gave this link as the reason for her particular interest in tigers (which the child had previously declared as an animal she hoped to see on the field trip). The following passage from Kate's pre-visit interview shows an example of this connection:

BL: ...is there anything else that you really hope that you'll get to do or see at the zoo?

Kate: Um, yeah, seeing tigers!

BL: Oh! Tell me about that. Why are you looking forward to that?

Kate: 'Cause me and my mom were born in the year of the tiger.

For one child in this study, the factor of prior indirect experience was found to shape her expectations of the zoo as a whole. Rebecca, who had not been to a zoo prior to the field trip, listed a variety of animals that she thought were in a zoo during her pre-visit interview, including seals, lions, sloths, and koala bears, and then had the following exchange with the researcher:

BL: How do you know that all these animals are in a zoo?

Rebecca: Uh, because the zoo has over one hundred animals.

BL: How do you know that?

Rebecca: My nanny got it off the computer...

BL: And she told you all about what she saw, or did you see it on the internet?

Rebecca: I can't read! So my nanny read it to me.

This time spent with her "nanny" learning about the zoo on the internet acted as a source of information about what could be seen at the zoo, and appeared to shape Rebecca's expectations of what was going to be at the zoo. Rebecca was one of the children who expressed a general agenda of seeing the animals at the zoo on the field trip (as described in section 4.2.1) and possibly her internet experiences could also have contributed to the shaping of this general agenda.

These connections between the children's field trip agendas and their personal history of indirect experiences with animals (and for one child, with the zoo) suggests that these experiences played a role in shaping their desires, hopes, and in one case expectations for the field trip. The prior indirect experiences that are part of the specific and unique worlds of young children, including reading books, watching television shows, and playing with toys, appear to be factors that the children drew upon to form their field trip agendas. The interest

sparked, or knowledge constructed as a result of these indirect experiences appear to have led in some way to the children having particular agenda elements for the field trip.

#### **4.4.3 Never having seen a specific type of animal before**

The desire to see an animal that they had never seen was a factor that appeared to shape three children's pre-visit agendas. In their pre-visit interviews, these three children said that they had never before seen some of animals that they desired or hoped to see on the field trip. Two of the children specifically stated that the reason they wanted to see specific animals is because they had never seen the animals before; although the third child did not explicitly make this connection, the researcher drew the connection between his desire and hope to see the animals and his statements that he hadn't seen them before. This factor was interrelated with other agenda shaping factors, as although the three children had never seen the animals in real life, they described having prior indirect experience with the animals through books, television shows, toys, or activities at school. For example, this factor appeared to play a role in shaping Rebecca's desire to see a giraffe on the field trip, as is illustrated in the following exchange in her pre-visit interview:

BL: What are you looking forward to doing at the zoo tomorrow?

Rebecca: Umm, seeing giraffes...

[Then, later in the interview]

BL: Why are you looking forward to see it [a giraffe]? What...

Rebecca: Uh, because I've never seen one with my own eyes before, and it's, it's kind of a big animal.

BL: What do you know about giraffes?

Rebecca: I know that they're big and very very very very very very tall.

BL: [laughed] Where did you learn that?

Rebecca: Off TV.

For these three children, the combination of the circumstances of never having seen an animal in real life, yet having developed an awareness of, or interest in, the animal through other means, appeared to be a factor in shaping their field trip agendas.

#### **4.4.4 Personal interests in animals**

Personal interests in animals appeared to be another factor in shaping the majority of the children's agendas. The majority of the children described a personal interest in one or more of the animals they desired or hoped to see on the field trip by identifying the animal(s) as their "favourite" animal (or one of their favourite animals) in their pre-visit interviews. Three children directly connected an animal being their favourite to why they were looking forward to or hoping to see the animal on the field trip. For example, Chris made this direct connection when describing his desire to see a tiger in his pre-visit interview:

BL: Okay, how about you tell us about your drawing?

Chris: A tiger. Now I'm going to need orange and black.

BL: .... So you're looking forward to seeing the tiger?

Chris: Mm, hm.

BL: Tell us about that.

Chris: Because they're my favourite animal.

For other children, the researcher drew a link between the children's expressed desires or hopes to see the animals and their classification of the animals as favourites, even though the children did not make this link directly. For example, Angela expressed in her pre-visit

drawing and interview that she was looking forward to seeing a cheetah, and also said that cheetahs are one of her favourite animals.

Additionally, the majority of the children showed their interests in these animals beyond calling them a favourite by providing more information about these animals and their prior experiences with these animals in their pre-visit interviews. These children declared facts they knew about each of these favourite animals that they desired or hoped to see on the field trip. These children also described either having seen these favourite animals on previous visits to zoos or zoo-like venues, and/or having prior indirect experiences with the animals in their socio-cultural worlds.

#### **4.4.5 Prior knowledge and conceptions about animals**

The children all related knowledge and/or conceptions they held about one or more of the animals they desired or hoped to see on the field trip in their pre-visit interviews; the majority of the children also showed their knowledge of one or more of these animals through their pre-visit drawings, many of which accurately depicted the shape, body parts, and colouration of the animals. The knowledge of these animals related by the children varied from more general to highly detailed information (see Appendix D, Table D3 for examples). Some pieces of information shared by several of the children about the animals were conceptions, rather than facts, although the children did not make this distinction themselves. These conceptions were beliefs about the animals' characteristics, such as that lions are wise or that tigers are cute.

Several children drew a connection between a characteristic of an animal and their desire or hope to see the animal on the field trip. These children said that they were looking

forward to seeing, were interested in seeing, or hoped to see an animal because of a characteristic or behaviour that they thought or knew about the animal in their pre-visit interviews. Adam, for example, related in his pre-visit interview his knowledge of giraffes and what he found interesting about giraffes, one of several animals he hoped to see on the field trip:

Adam: I hope I'll see giraffes...

BL: Why do you hope you'll see the giraffes?

Adam: Because, because giraffes are cool because they have long necks.

BL: Mm, hm. How do you know about their long necks?

Adam: I know why they have long necks so they could, if they're if, cause there's not enough things on the ground for them to eat.

This situation is also exemplified by Jennifer, who described her conception of monkeys as a reason for her desire to see monkeys on the field trip in her pre-visit interview:

BL: So what animal are you most looking forward to seeing?

Jennifer: I think monkeys, because monkeys are crazy. And I like crazy.

These several children's desires and hopes to see specific animals on the field trip appear to have been shaped in part by their knowledge and conceptions of the animals. Although the other children did not make a specific link between their knowledge and conceptions about the animals and their desires and hopes to see these animals on the field trip, this knowledge could possibly have contributed to the shaping of these agenda elements.

#### **4.4.6 School-related activities**

Notably, the majority of the children did not make mention of any school-related activities in relation to their agendas for the field trip. Even though the field trip was highly integrated into a science unit on animals in the classroom and the children participated in a comprehensive pre-visit orientation as well as many pre-visit activities, the majority of the children did not discuss or describe any of these activities in their pre-visit interviews. However, for the few children who did discuss school-related activities when talking about their field trip desires and hopes, or expectations, these activities appeared to have shaped their field trip agendas. These school-related activities included the pre-visit orientation, individual student projects, and reading a book in a classroom activity.

Only one child, Sean, referred to the pre-visit orientation led by the classroom teacher in his pre-visit interview. Due to scheduling reasons, four of the children were interviewed before the pre-visit orientation had taken place in the classroom; nevertheless, the lack of mention of this orientation by any of the other children in their pre-visit interviews is surprising. This orientation clearly shaped Sean's expectations for the field trip as he used the knowledge of the field trip schedule and activities that he gained in the orientation to explain to the researcher at what point in the field trip he anticipated seeing the birds, a particular animal he was looking forward to seeing (this passage of his pre-visit interview is presented in section 4.2.5).

In the week prior to the field trip, the grade 2 students in the case had been assigned an individual homework project to select an animal to investigate and create an informational poster about the animal. Three of the children in this study mentioned this project in their individual pre-visit interviews and expressed that they wanted to see their project animal (or

for one child, to feed the animal) on the field trip. For example, Matthew's desire to see a gorilla on the field trip appeared to be linked to this project assignment:

BL: What is it about gorillas that you like?

Matthew: 'Cause they're as big as my dad and, and they, and um, that's what my project is about.

BL: Oh what project is this?

Matthew: Gorillas. That's the animal I'm working on.

BL: This is the project for school?

Matthew: Yep.

BL: Ah! So what have you learned about gorillas?

Matthew: Not much. But they weigh, but they weigh 33,000 pounds.

These three children could be presumed to have an interest in these animals as they selected their own project animals. Furthermore, these three children said that they had been reading and learning about their project animals in books, and two of them described detailed information that they had learned about their selected animal. Therefore, this school activity appeared to play a role in shaping these three children's desires and hopes to see these animals, along with other factors.

One final mention of a school-related activity by a child in relation to a field trip agenda was made by Matthew regarding his hope to see polar bears on the field trip. He described that he had read about polar bears in a book at school during a science learning activity prior to the field trip; this agenda element was shaped by many factors, including that he had never seen a polar bear previously and he owned a polar bear toy at home, but this school-based reading also appeared to play a role in the shaping of his desire for the field trip.

In summary, these four children expressed links between their desired, hoped, or expected field trip experiences and their school-related activities, and these activities appeared to help shape their agendas for the field trip.

#### **4.5 Factors shaping agendas during the field trip**

The subgroup children's agendas continued to be shaped on the field trip. The during-visit data set was examined in conjunction with the pre-visit data relating to the eight children in the subgroup to generate the findings in this section. These findings are based on the expressions and actions of only the eight subgroup children who were video recorded on the field trip.

Two factors were found through this analysis that appeared to shape the children's agendas specifically during the field trip, and are discussed in the sections below: (a) the field trip program itself, and (b) advance sources of information at the zoo. These factors alerted the children to the presence of particular animal exhibits or other zoo activities, and hence provided the children with the information that there was a possibility or an expectation of them engaging with an exhibit or in an activity. The factors identified as acting to shape the children's pre-visit agendas possibly also continued to be at play during the field trip and interacted with the factors present at the zoo; this is discussed in the final section below.

##### **4.5.1 Field trip program**

As a part of the field trip program, the children participated in two animal tours which followed routes that were largely predetermined. Janet stopped the group at particular

exhibits along this route, and consequently the children were expected to engage with these exhibits. There was some flexibility in the animal tours, especially in the afternoon tour when the exhibits stopped at and timing of the tour were less structured. The routes of these tours also delineated the other exhibits at the zoo at which it was possible for the children to look. The animal tours that were part of the field trip program appeared to be a factor in shaping what exhibits and activities the children desired and chose to engage with on the field trip. This finding is considered in the following sections with respect to the exhibits that were a part of the tours, and other exhibits that were along the route of the tours.

#### **4.5.1.1 Exhibits that were a part of the program**

The vast majority of the animals visited by the subgroup children on the animal tours with Janet were not identified by any of the subgroup children as specific animals that they were looking forward to, or hoping to see, prior to the field trip. However, all of the subgroup children were deemed to show desires to look at and engage with many of these animal exhibits on the field trip day. As described in section 4.3.1, the subgroup children were considered to express these desires when exhibiting behaviours such as looking intently and continuously at exhibits, talking about the exhibit with a peer or the zoo educator Janet, and making joyful and interested exclamations at an exhibit (see section 4.3.1 for the complete list). Therefore, the selection of exhibits that were included by Janet as a part of the field trip program appeared to be a factor that shaped the subgroup children's desires to engage with these exhibits on the field trip.

For example, one pair of exhibits which provoked a high level of engagement from the subgroup children was the side-by-side tapir and rhinoceros exhibits. The subgroup

children showed a strong desire to engage with these animal exhibits, although none of these children had declared a desire or hope to see either of these two animals prior to the field trip<sup>5</sup>. Six of the eight subgroup children looked intensely and continuously into these exhibits for many minutes, showing attention to the animals and also appearing to listen to Janet talk about the animals. A seventh, Jennifer, showed an affective reaction to the exhibit exclaiming, "Holy smokes!", when she looked into the tapir exhibit, and was also heard to ask Janet four questions about these animals.

An episode with Sean and the tarantula exhibit provided a uniquely explicit example of this factor acting to shape his agenda during the field trip. The children stopped at the tarantula exhibit with Janet, but they were crowded around the small exhibit window and Sean was last in the group to arrive at the exhibit. When Janet and the tour group moved along the gallery path, Sean exclaimed to Janet, "But I didn't get to see the tarantula." Janet replied, "He's in the very first window so go back and take a look." Sean moved back to the tarantula exhibit and spent some time looking into the exhibit very intently. Although Sean had not mentioned tarantulas prior to this point in the field trip, once the tour stopped at the tarantula exhibit he expressed an expectation and a desire to see the tarantula.

#### **4.5.1.2 Exhibits that were along the route of the program**

The exhibits along the route of the animal tours as well as those in the area of the exhibits visited on the tours also appeared to shape the subgroup children's agendas during the field trip. The subgroup children were able to see other exhibits that they passed along the route of the animal tours, in the areas of the galleries in which the children stopped with

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<sup>5</sup> One subgroup child did mention liking seeing the rhino on a previous zoo visit in his pre-visit interview, but did not convey a pre-visit desire or hope to see the rhino on the field trip.

Janet, and up ahead on the paths. In some instances, when children in the subgroup saw these exhibits and hence became aware of the possibility of looking at these exhibits, it appeared as though they formed desires to do so. As described in section 4.3.1, all of the subgroup children were deemed to show these types of immediate desires on at least one occasion each by acting on them during the field trip; the children stopped to look at an exhibit that had caught their attention en route to another exhibit in the tour, or moved away from Janet and the other children to engage with another exhibit. Through these actions the children were deemed to express their developing agendas to look at these other exhibits. This factor was observed to be a factor in shaping the subgroup children's agendas mainly during the morning animal tour when the children were in a pavilion that contained many exhibits, in which Janet stopped the tour at only specific exhibits along the zoo path.

#### **4.5.2 Advance sources of information at the zoo**

Two other mechanisms that informed the subgroup children during the field trip of what exhibits were present at the zoo to see, and what they could expect to see and experience on the field trip, were observed. First, Janet, the zoo educator, made statements during the animal tours about what animals and exhibits they were moving onto next. Second, there were zoo signs on the zoo paths that pointed the way to particular animal exhibits. These two mechanisms, discussed below, acted as advance sources of information which informed the children as to what could be coming up on the field trip, and they appeared to shape desires in the children.

Janet made announcements at several points on the animal tours of what exhibits they were moving to look at next on the tour. Some subgroup children were seen showing

immediate desires to see these animal exhibits in response to these announcements. These subgroup children were deemed to express these desires through their positive responses to the announcements, including making excited comments about seeing the animal, running and skipping towards the exhibit, and/or making excited facial expressions. These expressions and behaviours were seen both in situations when the animal exhibit announced by Janet was one identified as an agenda element by the child prior to the field trip, and when the animal exhibit had not previously been expressed as a part of the child's agenda. For example, Jennifer, who declared a desire to see monkeys prior to the field trip, responded enthusiastically to Janet's announcement that they were going to see monkeys; Jennifer exclaimed excitedly, "We're going to see monkeeeeeeys!", and skipped off down the zoo path towards the exhibit. In another example, in an episode involving Natalie and an exhibit of birds, Janet announced that, "We're going to see some birds right now"; although Natalie had not previously mentioned an agenda of seeing birds, she responded to this announcement with an excited exclamation of, "Yay! Birdies! Birdies!"

The zoo has sign posts on the sides of the paths between the animals which indicate the direction to certain animal exhibits; the signs include both the name of the animal and a drawing of the animal. Subgroup children were seen looking at these zoo signs at two points along the field trip route, and two situations were captured on the video recordings in which these signs appeared to spark a child's immediate desire to see an animal. In both of these situations the child looked at the sign and then verbally expressed that he wanted to see the animal. For example, Matthew's expression to Janet of his desire to see gorillas on the field trip (that was described in section 4.3.1) was instigated by him seeing a zoo sign for the gorilla exhibit during the afternoon animal tour. Matthew looked at the sign then exclaimed,

“Gorillas this way,” and pointed down the path in the direction indicated by the sign, which was also the direction in which the children were walking. He then said to Janet, “I want to see a gorilla.” Both of the observed situations where a zoo sign appeared to shape a child’s agenda during the field trip involved animals that were identified by the children in their pre-visit interviews as animals they desired or hoped to see on the field trip. Therefore, the zoo signs appeared to bring these elements of their pre-visit agendas to the front of their minds to spark immediate desires to see the animals.

#### **4.5.3 Interaction between the factors**

The factors that appeared to shape the children’s agendas at the zoo served to alert or inform the subgroup children as to the possibility of engaging with an animal exhibit. However, the subgroup children did not respond to all of the possible exhibits, activities, and advanced sources of information presented to them at the zoo by showing or expressing desires or hopes to engage in the possible activities. Therefore, it is possible that these factors acted in conjunction with one or more of the factors identified in section 4.4 as shaping the children’s agendas prior to the field trip. The factors identified from the pre-visit data set, including prior experiences, personal interests, and prior knowledge, could possibly have continued to act throughout the field trip to shape what the children chose to respond to from all of the opportunities available to them during the field trip. This suite of factors possibly played roles in the children’s personal determinations as to whether or not to respond to these opportunities by forming a desire to engage with an exhibit or activity.

## **4.6 Impacts of agendas on learning and experiences**

The post-visit data set, consisting of the post-visit interview transcripts, post-visit drawings, and post-visit observations, was examined in conjunction with the pre-visit data set for all 16 children in the case to generate the findings in this section. When relevant, the during-visit data set was also examined for the eight children in the subgroup in generating these findings; the subsequent sections indicate explicitly when this data set was included in generating a finding. The children's agendas were found to impact on their learning and experiences on the field trip in multiple ways. The most apparent impacts that were found through this analysis are described below. These impacts are considered within four main sections. The first three sections discuss the outcomes of situations when the children were able to engage in their agendas during the field trip. These situations are addressed with respect to the children's engagement in their expressed pre-visit agendas, the children's unexpected experiences during the field trip, and the subgroup children's engagement in the agendas that they expressed during the field trip. The fourth section discusses situations when the children missed out on aspects of their agendas.

### **4.6.1 Engaging in aspects of their pre-visit agendas**

All of the children had the opportunity to engage in one or more elements of their expressed pre-visit agendas during the field trip. The impacts of the children's engagement in aspects of their agendas on the field trip are discussed in the following sections with respect to their exhibit-based pre-visit agendas, and their social pre-visit agendas.

#### **4.6.1.1 Engaging in their exhibit-based pre-visit agendas**

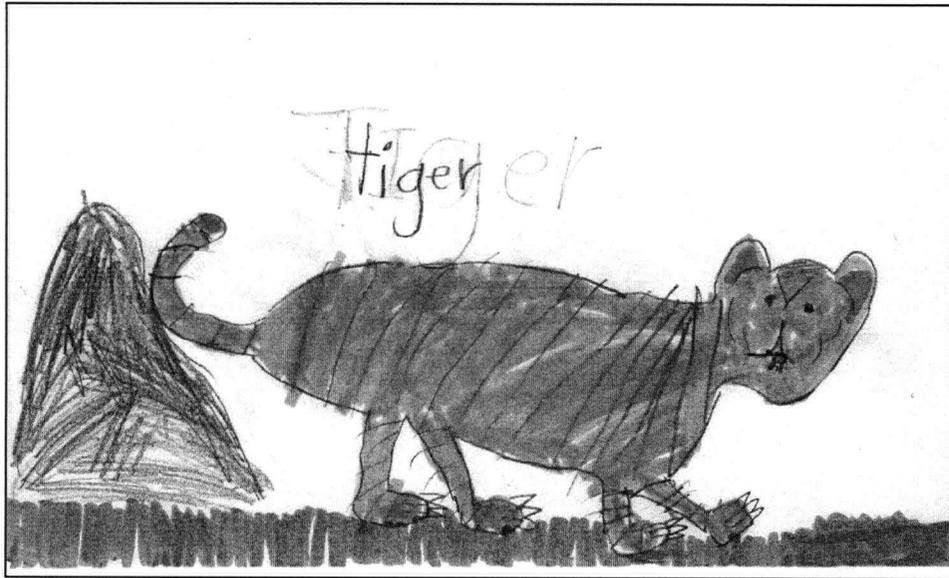
All but 1 of the 16 children engaged in one or more of their expressed pre-visit, exhibit-based desires or hopes on the field trip. The 14 children who had the opportunity to see a specific animal that they had expressed as a part of their desires or hopes for the field trip prior to the trip, expressed some enjoyment, learning, or both from this experience. Similarly, three of the four children who had expressed general desires and hopes to see many animals prior to the field trip, expressed some enjoyment, learning, or both, from seeing the many animals. The following vignette reveals the learning and enjoyment that resulted from Chris seeing tigers on the field trip, an element of his pre-visit agenda.

#### **Vignette**

Chris had a strong desire to see a tiger on the field trip to the zoo, as described in section 4.2.1. Chris expressed the importance of his experience of seeing the tiger on the field trip in multiple ways after the field trip. Upon returning to the classroom, when the teacher asked the children what they liked at the zoo, Chris gave a response of, “tigers.” He then made a tiger the subject of his post-visit drawing (see Figure 4.7). In his post visit interview, he stated that the tiger was what he enjoyed most on the field trip and talked animatedly about this experience. He expressed that he had seen it had big teeth and he had enjoyed seeing these teeth. When asked how he had felt when he saw the tiger he said that he had felt, “Wow.” He said that he knows a lot about different types of tigers and thinks that the ones he saw were Bengal tigers. When shown a video episode of his looking at the tiger text panel, he explained that in that moment he was talking about the tiger attacking the

deer (there were other subgroup children who were also looking at the text panel), which was shown on the text panel.

**Figure 4.7 Chris' post-visit drawing - the tiger**

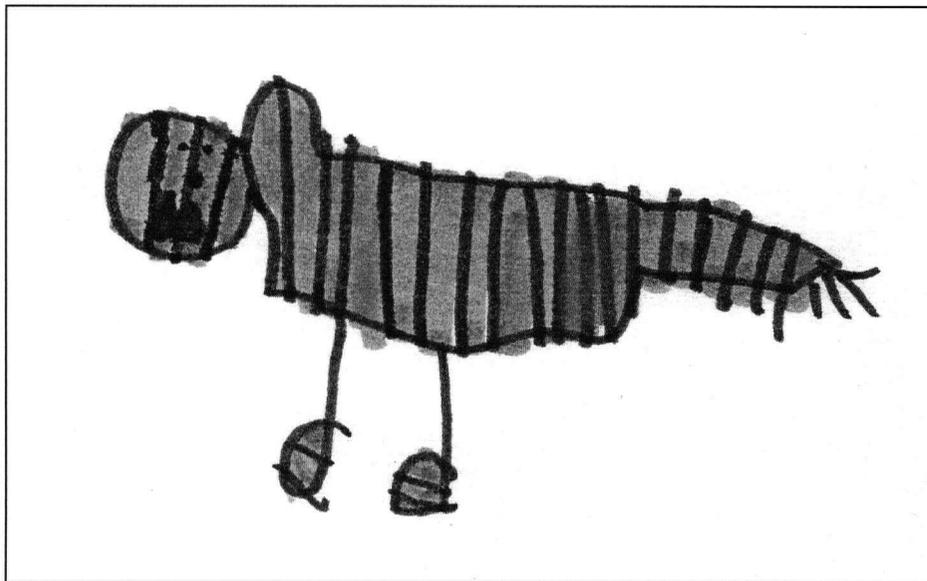


#### 4.6.1.1.1 Enjoyable experiences

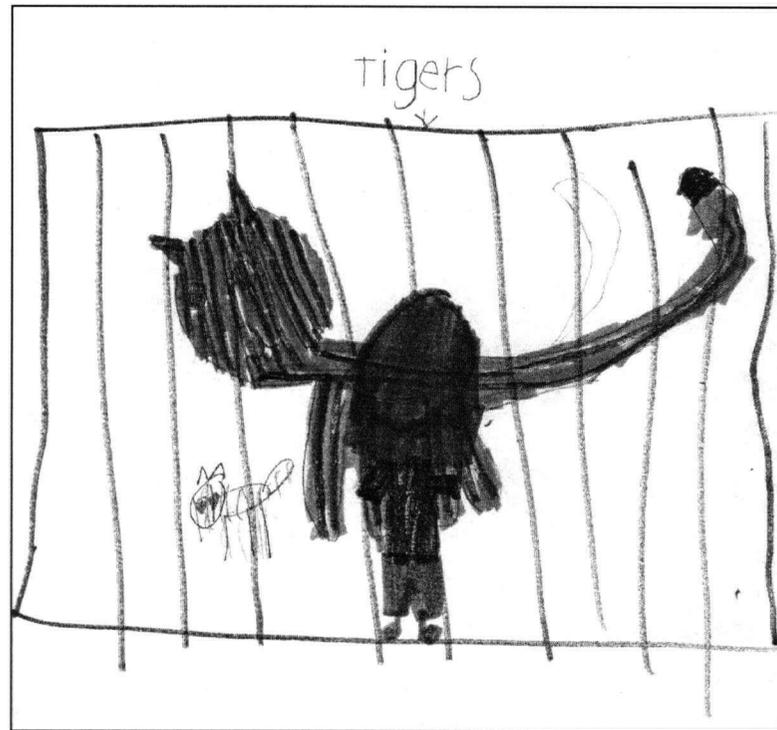
The majority of the children expressed that they had enjoyed experiences on the field trip which they had expressed prior to the field trip as desires or hopes for the trip; these expressions were made verbally in their post-visit interviews and/or through their post-visit drawings. Specifically, several of the children identified an experience of seeing an animal that had formed part of their expressed pre-trip desires and hopes as their most enjoyed experience at the zoo in their post-visit interviews. Furthermore, two children who had expressed general pre-trip agendas of seeing many animals at the zoo identified their experiences of generally seeing the animals, or liking all the animals, as what they enjoyed most on the field trip during their post-visit interviews. Additionally, several of the children

depicted an animal in their post-visit drawings that they had expressed desires or hopes to see prior to the field trip. The specific prompt for this drawing activity was to draw what they had enjoyed most on the field trip and, therefore, these drawings were considered as expressions of their enjoyment of seeing the animals on the field trip. For example, six children who had each named the tiger as an animal which they desired or hoped to see on the field trip created post-visit drawings of the tiger exhibit (see for example Neil's and Natalie's drawings, Figures 4.8 and 4.9).

**Figure 4.8 Neil's post-visit drawing - the tiger**



**Figure 4.9 Natalie's post-visit drawing - the tigers**



The during-visit data set from the subgroup of children who were video recorded during the field trip was also found to provide evidence that supports this finding. Several of the subgroup children were observed on the video recording showing that they were having a positive experience while engaging in an exhibit-based element of their pre-visit agendas on the field trip. Specifically, several of the subgroup children were observed to have exciting or highly engaging moments with an animal exhibit at the zoo that formed a part of their pre-visit desires or hopes. These moments were deemed to be significant to these several children as judged by their intense and/or extended engagement with the exhibit, or their excited verbal exclamations when looking at the animal. For example, Mark was seen to have a positive reaction to seeing monkeys (the only specific animal he had expressed a desire or hope to see prior to the field trip) during the morning animal tour at the zoo. When

Mark walked up to the monkey exhibit window, he excitedly exclaimed, "...look at that one!", and pointed into the exhibit. He then moved along the exhibit window and upon looking up into the exhibit (presumably seeing a monkey) loudly exclaimed, "Whoooooaaaaa." In another example, Chris had a notably intense and extended engagement with the tiger exhibit on the field trip, the animal he expressed he most desired to see prior to the field trip (see the vignette in section 4.6.1.1 for more details). Upon approaching the tiger exhibit, Chris looked intently into the exhibit and climbed up onto the exhibit fence. He then moved over to the exhibit text panel, looked intently at different parts of the panel, and then moved back to the exhibit fence. He continued to look at the tiger for a moment even after Janet had moved the tour on to the next exhibit, until he suddenly appeared to realise that everyone had moved on and he moved on himself.

#### 4.6.1.1.2 Learning

The majority of the children learned from an experience of seeing a specific animal that they had desired or hoped to see, or in one case from engaging in a general agenda of seeing many animals at the zoo. Each of these children's learning from these experiences was in one or more of the cognitive, affective, and emotional dimensions.

The majority of the children learned in the cognitive dimension from one or more of their experiences of engaging with specific animal exhibits that they had expressed as desires or hopes for the field trip prior to the visit. Specifically, the majority of the children verbally declared one or more pieces of factual knowledge or changes to their prior knowledge and conceptions that had come from one or more of these experiences, in their post-visit interviews. These children conveyed their learning from these experiences in their

interviews by describing an aspect of the animal that they saw or declaring a piece of knowledge about the animal or exhibit that they said they had learned, seen, or found out on the field trip by looking at the animal or hearing about it from their tour guide. This cognitive learning included knowledge about the animals' size, body parts, behaviour, diet, and differences between sexes, as well as information about the animals' exhibits.

For example, Jennifer, who had expressed a pre-visit desire to see monkeys, enthusiastically relayed many facts that she had learned about monkeys (both the small monkeys as well as the larger orangutan apes), from seeing these animals on the field trip. In the following passage of her post-visit interview she expresses her cognitive learning from one of these moments:

Jennifer: ...I saw an orangutan eating.

BL: Oh, okay. And what was he eating?

Jennifer: He was eating a mango.

BL: Oh, okay, neat. So what did you find out from looking at the orangutans?

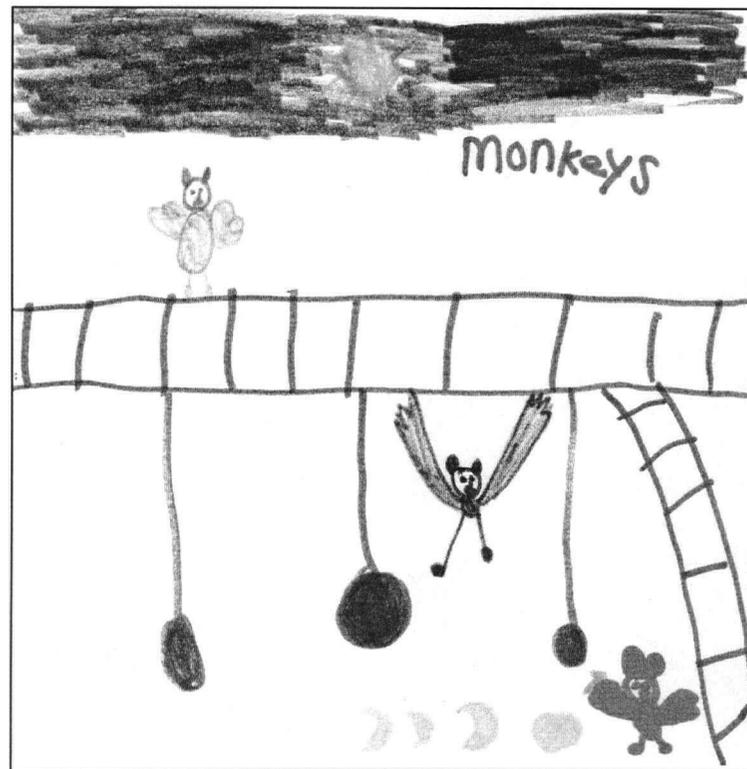
Jennifer: I found out that they walk like that.

BL: Oh, how's that?

Jennifer: Like, on their feet, they walk like, they walk like this, um, but then they walk like that. [Jennifer was using her hands to show how orangutans walk on their knuckles]

Jennifer's post-visit drawing (see Figure 4.10) supports these statements; she explained that animals in the drawing are orangutans and the objects at the bottom of the drawing are bananas and a mango.

**Figure 4.10 Jennifer's post-visit drawing - the orangutans**



Several of the children's cognitive learning from their experiences of seeing an animal that was a part of their pre-visit agendas appeared to consist of modifications to their knowledge or conceptions of an animal as a result of having seen or learned about them on the field trip. Specifically, three children described aspects of these specific animals that were different than they had thought prior to the field trip, in their post-visit interviews. These aspects consisted of the shape of a tiger's neck and back, the ability for polar bears to survive in the sun even though they have big fur coats, and the number and size of alligators' teeth. For example, Rebecca, who named alligators as one of two specific animals that she hoped to see on the field trip, expressively related the following about her learning regarding alligators' teeth to the researcher in her post-visit interview:

Rebecca: There was one [alligator] that was huge, and its teeth were like [Rebecca physically demonstrated what she was trying to communicate by drawing lines in the air in front of her own mouth to show that alligators have lots of teeth pointing downwards in their mouths].

BL: And did you, did you know they had teeth like that before you went to the zoo?

Rebecca: No, I thought they had [here she showed two lines, corresponding to two teeth, one of either side of the mouth pointing down]... They [the teeth] were all big, like and I only thought that the teeth [inaudible words] were big.

This passage suggests that Rebecca modified her prior conceptions and constructed new knowledge of the number and size of alligators' teeth from seeing the alligators on the field trip. Furthermore, several children exclaimed in their post-visit interviews about the large size of an animal, or of one of its body parts, that they had desired or hoped to see on the field trip. These expressions suggested that these children found that the animals, or parts of the animals' bodies, were larger in life than they had expected, and hence these children possibly modified their conceptions of these animals' sizes by seeing the animals on the field trip. Two of these children specifically conveyed that the animal, or the body parts of the animal, were larger than they expected. For example, Neil, who had expressed in his pre-visit interview that he was looking forward to seeing tigers on the field trip, conveyed in his post-visit interview how the tigers that he saw on the field trip were bigger than he had thought tigers were before the trip:

BL: How did you feel when you saw the tigers?

Neil: Um, I felt like I was one of them and that I didn't see a tiger that big before.

BL: Oh. Tell me more about that.

Neil: Um, I only saw the tigers like that big, the bigness was that big [inaudible words].

BL: Did you know they were that big before?

Neil: No.

During this interchange with the researcher, Neil stood up and moved behind his chair to show with his hands how big the tiger was at the zoo, and thus described with great expression how the tigers he saw on the field trip were bigger than he had expected.

Learning in the affective or emotional dimensions emerged from the majority of the children's experiences of seeing an animal that they had desires or hopes to see prior to the field trip, or in one case of seeing multiple animals exhibits as a part of a general pre-visit agenda of seeing many animals. Specifically, several of the children used terms such as interesting, neat, weird, cool, and wow to describe the animals or their experiences with the animals, or said that they had liked the animals that were a part of their expressed pre-visit desires and hopes and which they had seen on the field trip. Each of these words was used by at least one child and appears to show an affective dimension to these children's learning about the animals. A particularly strong example of a child's affective learning from engaging in her expressed pre-visit agenda is Mary who had a general desire to see and stop to look at many animals on the field trip. In her post-visit interview, Mary described her cognitive and affective learning from seeing many different animals at the zoo; for example, she described some of her thoughts and learning about the animals as "cool", as shown in the following excerpts:

Mary: I thought it was cool because I've never seen one, the octopus... it's so small. I thought it would be huge, like big, but [inaudible word] really small.

Mary: Um, it was cool watching, um, the little monkey trying to get, um, when it was climbing in that, in those ropes.

Mary: Oh, there's one thing that I thought was cool. Um, that that little snake, that little snake was so small. That little snake was so small and it could kill you, no it was venomous. I didn't know that it, because it was so small. I thought only really big ones could do that.

Furthermore, several of the children described emotional responses to the animals which they had expressed as desires or hopes to see prior to the field trip. In their post-visit interviews these several children each expressed one of a special connection with an animal, being scared by an animal, feeling like the animal, or feeling that they were the animal. For example, Jessica, who had a pre-visit agenda of seeing a tiger on the field trip, expressed the following feeling in her post-visit interview about her moment of seeing the tigers:

BL: How did you feel when you were looking at them [the tigers]?

Jessica: I felt tigery. Because I like to, I like to pretend to be a tiger. So I ran, I ran over to the, to the kangaroo like I was a tiger. [laughed]

In another example, Jennifer conveyed her experiences of a connection between her and the monkeys she saw in two of the zoo's exhibits, an animal that was a part of her pre-trip agenda, in her post-visit interview:

Jennifer: ...the big orangutan, like I think that was the dad, was lo, was staring at me. [He] was like, eating a mango and staring at me.

BL: So how did you feel when you got to see those little monkeys?

Jennifer: I felt like, I felt like I was going to go in there and just play with them, but I couldn't because I wasn't allowed.

#### 4.6.1.1.3 Note

Overall, many of the children's moments of engaging in aspects of their pre-visit exhibit-based desires and hopes were rewarding experiences of learning and/or enjoyment for the children. However, it is important to note that the majority of the children expressed having enjoyed or liked one or more other animals on the field trip that they had not expressed a desire or hope to see prior to the field trip, in the post-visit interviews, observations, and/or drawings. Similarly, the majority of the children expressed learning that they had gained from these other experiences. Therefore, although the children had many rewarding experiences on the field trip while engaging in their pre-visit agendas, they had a wide variety of rewarding exhibit-based experiences on the field trip that were not related to their expressed pre-visit agendas. Some findings regarding these other experiences are discussed in sections 4.6.2 and 4.6.3.

#### **4.6.1.2 Engaging in their social pre-visit agendas**

Although all the children had the opportunity to interact socially with peers and chaperones on the field trip, interestingly, only three children described experiences that were related to their pre-visit agendas of spending time with a peer or parents on the field trip in their post-visit interviews. These three children verbally described their experiences of spending time with this person on the field trip in a positive manner. First, Matthew described his experiences of eating lunch and riding on the bus with his peer (Chris) on the field trip in his post-visit interview; he said, "It was fun how we looked at all the animals

and, and we had lots of fun times...”, in reference to their time together. Second, Angela described that she had spent a lot of time with her parent/guardian chaperone on the field trip, in her post-visit interview. Finally, Kate, whose pre-trip agenda included the desire to spend time with her chaperoning mother and friends, was unique amongst the children in declaring that her social experiences were the part of the field trip she enjoyed the most. The following interchange, that took place right at the beginning of her post-visit interview, shows this enjoyment:

BL: So what did you enjoy most about the trip to the zoo?

Kate: Um, that my mom was my partner.

BL: Yeah? Tell me about that.

Kate: Um, [Diane] was also my partner too, um, and we had lots of fun, and we saw the tigers.

The social aspect of her experience of spending time with her mother was particularly important to Kate before the trip and continued to be important in her thoughts after the field trip. Indeed, in her post-visit interview she expressed feeling happy about being partners with her mother and described more than one of her interactions with her mother on the field trip, including hugging her mother on the bus and eating lunch together.

Overall, although the majority of the children described desires or hopes to spend time with peers or parents/guardians on the field trip in their pre-visit interviews, only three of these children described their social experiences in their post-visit interviews. Yet, these three children appeared to have positive experiences, of varying degrees of importance, from engaging in these social agendas.

#### **4.6.2 Engaging in unexpected experiences during the field trip**

In the post-visit interviews, several of the children talked about animals and activities that they had seen or done on the field trip which they expressed they had not expected to see or do, but that had become memorably important or interesting moments for them on the field trip. These children described these experiences as something they didn't know they were going to see or do, didn't expect to find, or a surprise (in response to questions asked by the researcher), which indicated that these experiences were not a part of their agendas or expectations for the trip. However, although unexpected, when these experiences presented themselves at the zoo, they appear to have become parts of the children's agendas during the visit. Most of these occurrences were seeing animals that the child had not expected to see.

These surprises were found to have some positive impacts for these several children in that they were rewarding experiences of enjoyment and/or learning. First, the experiences that emerged from these types of moments inherently involved an affective dimension of unexpectedness or surprise. Additionally, these unexpected activities and experiences resulted in cognitive learning for several of the children who described knowledge of the animals that they had learned from these unexpected experiences. This knowledge included information about the animal's size, body parts, behaviour, and exhibit space. Furthermore, several of these children specifically expressed having enjoyed these unexpected experiences either verbally in their post-visit interviews, and/or by including the animal in their post-visit drawings of what they enjoyed most about the field trip.

Two children stand out from the others with respect to the importance of their described unexpected experiences to their learning and experiences on the field trip; the importance of these experiences was judged by the children's expressions of learning of

multiple new pieces of knowledge about the animals in their post-visit interviews as well as their expressions of enjoyment of the experiences in both words and drawings. The first child, Jessica, described her exciting experience of seeing boa constrictors on the field trip, an animal she did not know she was going to see, in her post-visit interview. She expressed her learning, excitement, and enjoyment from seeing this animal in her post-visit interview and drawing (see Figure 4.11):

BL: So, here's your picture, can you tell me a bit about it?

Jessica: Well, this is a boa constrictor and it's pretty long...

BL: So, uh did you know that you were going to see the boa constrictor on the trip?

Jessica: Uh, no, but it was so, it was exciting.

BL: Yeah? Tell me more about why it was so exciting.

Jessica: Why it was exciting is because, well, sometimes boa constrictor can be, um day sleepers. Yeah, so they're nocturnal...

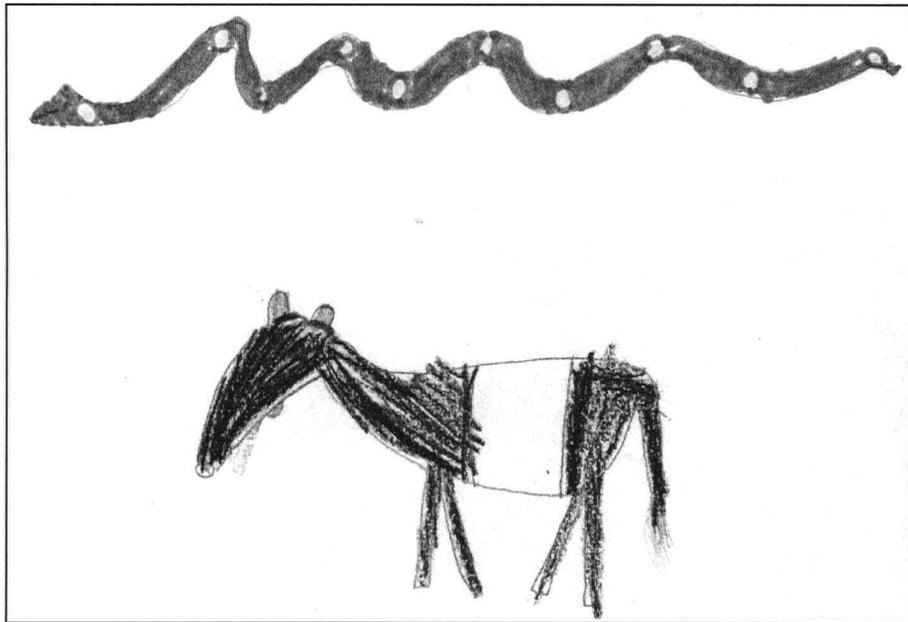
BL: Did you notice anything else about boa constrictors?

Jessica: Well I noticed that they're very long and sometimes they live in families!

BL: Huh! Was it longer than you expected? Yeah?

Jessica: I had to use as long as the page to draw it.

**Figure 4.11 Jessica's post-visit drawing - the boa constrictor (and the tapir)**



The second child, Matthew, identified the orangutans as the animal he liked most at the zoo during the post-visit classroom discussion and his post-visit drawing showed only this one animal (see Figure 4.12), yet he said in his post-visit interview that he did not know he was going to see orangutans on the field trip. Matthew described his learning and enjoyment from this experience in his post-visit interview:

BL: So what did you enjoy most about the trip to the zoo?

Matthew: I liked four things.

BL: Okay.

Matthew: One was the um orangutan... [Matthew listed three more animals]

BL: So tell me about the orangutan.

Matthew: It was funny because, um, the little one was moving back and forth and then he was climbing something to get something from a pail up [inaudible word].

BL: Oh neat. So what did you like so much about the orangutan?

Matthew: Um, I liked how, how what they eat. It's weird that they eat banana peels and um, the inside of a, what's it called, um, the like, it was shaped like this, I forget what it was called [he was referring to a mango]...

BL: ... I have your picture here, could you tell me a bit about it?

Matthew: I liked how it moved around and, how it [had] big hands and it had hands on its feet.

**Figure 4.12 Matthew's post-visit drawing - the orangutan**



Therefore, seeing the orangutans, although unexpected, turned out to be an enjoyable learning experience for Matthew on the field trip.

Overall, these unexpected experiences could represent agendas these several children formed during the field trip, as they were not known or thought to be a possible field trip

experience beforehand. However, the unexpected events led to memorable, rewarding experiences for these children. These experiences suggest that agendas generated during the visit were important for these several children in the case, and also suggest the power of surprise and unexpectedness in generating memorable experiences for these children on the field trip.

#### **4.6.3 Engaging in agendas shown during the field trip**

The data collected with the subgroup children during and after the field trip were examined to consider the impacts of the agendas that the subgroup children were observed to express during the field trip on these children's learning and experiences on the field trip.

It should be mentioned that analysis of the data collected with the subgroup children did not reveal clear findings regarding the impacts of these children's during-visit agendas of engaging with exhibits that they had not mentioned prior to the field trip. In their post-visit interviews, the subgroup children each expressed enjoyment and learning from seeing one or more animals on the field trip that they had not expressed as a part of their pre-visit desires and hopes; some of the subgroup children depicted these other animals in their post-visit drawings. However, no consistent theme was found from the data regarding a connection between the animals the individual subgroup children described enjoying and learning about on the field trip in their post-visit interviews or drawings, and the animal exhibits that these individual children expressed (or were deemed to show) desires to see on the field trip.

This analysis did reveal two areas of impact of these during-visit agendas. These areas will be considered in the following two sections with respect to the subgroup children:

(a) engaging in their social agendas, and (b) taking their attention away from the group to engage in their own agendas.

#### **4.6.3.1 Social agendas during the visit**

The subgroup children were deemed to show social agendas of interacting with peers and/or parent/guardians on the field trip. Yet, in the post-visit interviews, only one of these children mentioned an experience of engaging in one of these social, during-visit agendas. This one child, Matthew, described having fun with his peer (Chris) on the field trip, as he had expressed a desire or hope to do prior to the field trip (as described in section 4.6.1.2).

However, three of the subgroup children who were considered to have shown agendas of interacting with Janet, the zoo educator, during the field trip, mentioned Janet in their post-visit interviews. Two of these children reported a variety of knowledge that they said they had learned from Janet on the field trip. First, Jennifer explicitly described her agenda of listening and asking questions to Janet during the field trip (confirming the researcher's observations and interpretations of her actions on the field trip) and the learning that she achieved from these experiences, in her post-visit interview:

Jennifer: ...I said, I said what's that rhino's name and then she [Janet] said I'm not sure. Because there's two that look like the same [inaudible words].

BL: Oh. Do you like asking a lot of questions?

Jennifer: Yeah.

BL: Yeah?

Jennifer: So I could get, so I, so I can be smart.

[Then, later in the interview, talking about the tarantula exhibit:]

BL: ...So what did the fangs look like?

Jennifer: They looked like little spikes like that.

BL: Coming from where?

Jennifer: Coming out of their body because that's their, that's their thing to attack other animals.

BL: Oh, and you found that out on, how did you find out about that?

Jennifer: Um, I found out because I learned and [Janet] told me.

BL: And [Janet] told you. Ah. So did you ask [Janet] lots of questions? Did she have...  
[interrupted]

Jennifer: She knows a lot!

BL: Oh! Did she answer all your questions?

Jennifer: Yeah, I think so.

Jennifer declared at several points in the interview that she had learned a particular piece of knowledge from Janet. For example, Jennifer described the following learning about orangutans from Janet on the field trip:

Jennifer: And I learned that they, they clean other monkeys to get all the bugs off...

BL: Oh okay. How did you find that out?

Jennifer: I found out because, because I saw them cleaning each other and then, I just asked [Janet], I asked [Janet] what they're doing and she said they're cleaning the bugs off.

Mary, who was observed to have an agenda of listening and being attentive to Janet throughout the field trip, described her learning from listening to Janet during the field trip in her post-visit interview:

BL: What did you enjoy about seeing them [the sea anemones]?

Mary: They were pretty [inaudible word], I thought they were cool. She told us some interesting facts, like um, it stings fish and eat it.... but it couldn't do it to um, oh what was it called. Um, that fish, it can't do it to clown fish.

BL: Oh, did [Janet] tell you all this?

Mary: Yes.

[Then, later in the interview:]

BL: So what did you find out new about orangutans from seeing them?

Mary: They can get bored.

BL: Oh, how did you see that? Or how did you find that out?

Mary: Um, [Janet] told us.

BL: Ah.

Mary: But they're smart enough monkeys they can get [inaudible word].

These two children appear to have both learned from their experiences of attending to their social agendas during the field trip of interacting with Janet, the zoo educator.

#### **4.6.3.2 Agenda takes a child's attention away from the program activities**

All of the subgroup children were observed to move themselves and their attention away from the tour group at one or more times throughout the field trip day to look at other exhibits (as described in section 4.3.1). These moments, in which the children were considered to be attending to their own agendas, took the children's attention away from Janet and the program animal tours. These situations potentially had mixed impacts on the children's learning and experiences on the field trip.

On one hand, in the situations when a child (or group of children) was observed to follow his or her own agenda to look at another exhibit away from Janet and the tour activities, the child potentially had rewarding experiences. By looking at and interacting with other exhibits of their own choosing, the children potentially learned and had interesting, enjoyable experiences. To investigate the meaning made by the children of these

situations, the investigator probed these moments during the video playback sections in the post-visit interviews of two of the subgroup children.

In the first of these situations, Matthew and his friend Chris were ahead of Janet and many of the other children on the zoo path during the morning animal tour looking at an exhibit together, as they were seen to do on more than one occasion. Matthew drew Chris' attention to an exhibit of model birds hanging from the ceiling of the pavilion by exclaiming "Whoa, look up there, [Chris]," and then, holding Chris by the shoulders, turned him around and pointed up to the ceiling saying, "Look there." Matthew explained in his post-visit interview, after viewing this episode on video, that he had wanted to share his interest in the exhibit with Chris:

BL: So why did you want to show [Chris]?

Matthew: Because I thought that, that it would look, that he would be interested in those.

BL: Is that what, is that what you and him do together sometimes if you see something interesting?

Matthew: Yeah.

These insights that Matthew provided in his interview suggest that this moment spent looking at this exhibit with Chris constituted an interesting experience for Matthew on the field trip.

In the second situation Jessica was asked in her post-visit interview to comment on a video-recorded episode of her walking away from the tour group at the rattlesnake exhibit to look at an exhibit of turtles and then moving on to interact with a text panel (described in

section 4.3.1); Jessica explained why she left the tour group in this manner in her post-visit interview:

BL: What's happening here?

Jessica: Well, I was just on my way to see the turtle.

BL: Oh!

Jessica: I wondered what that sound was so I walked, I walked right over to that and pressed the button and nothing happened.

BL: Oh, okay.

Jessica: I was interested.

BL: ... I'm just wondering why you went off, you went, you went off from where the group was and you went to look at something else, I was wondering why?

Jessica: Because I've never been to a big zoo before.

In this passage, Jessica suggested that she was following her own interest when wandering away from the tour group, and wanted to engage in the experiences that the Toronto Zoo had to offer.

In these moments, by following their own agendas and moving to look at other exhibits, these two children engaged in interesting moments on the field trip. The other subgroup children could potentially also have engaged in similarly rewarding experiences from their moments of leaving the tour group to follow their own agendas on the field trip.

The converse potential impact of a child taking his or her attention away from the field trip program and moving away from the tour group, was the child missing out on the intended field trip program learning. This workshop program was intended to help the children learn about the topic of the seasonal changes that occur in animals. When the children's attention was taken elsewhere by their own personal agendas, they were

potentially missing out on learning opportunities that were part of the program. For example, in the situation described above, while Jessica was wandering away from the tour group to explore her interest in the turtle exhibit and snake text panel, she was missing out on Janet's discussion with the children about where rattlesnakes live and their poisonous capabilities. This represents a missed opportunity for her to have constructed and built upon her knowledge in this area.

Therefore, the situations of children taking their attention away from the program's activities to engage in activities of their own interest could have constituted a double-edged sword of impact on the children's learning and experiences from the field trip. By leaving the tour group to follow their own interests and desires on the field trip, the children potentially missed out on learning experiences with the tour group. However, from the children's perspectives, which are the focus of this study, these situations potentially constituted interesting and/or learning experiences.

#### **4.6.4 Missed out on an aspect of an agenda**

The majority of the children did not have the opportunity to engage in one or more aspects of their agendas during the field trip. These circumstances arose because the children were enrolled in a workshop program which engaged them in particular activities and provided them with the opportunity to see particular animals on the field trip, and consequently they did not have the opportunity to see other animals or take part in other zoo activities. Additionally, some agenda elements of the children were impossible to engage in during the field trip because the animals involved were not present at the Toronto Zoo; for

example, there were no belugas at the Toronto Zoo, which made it impossible for the child whose agenda included this animal to engage in this agenda element.

The circumstances of missing out on aspects of their agendas had varying impacts on the children's experiences on the field trip. The two main impacts found from the data analysis were broadly categorised as: (a) thoughts that they missed out on an experience, and (b) feelings of sadness.

#### **4.6.4.1 Missed out on an experience**

The majority of the children conveyed in their post-visit interviews that they had missed out on doing or seeing something that they wanted to see or do on the field trip. These children expressed that they had missed out on an experience at the zoo in three ways. First, several children discussed one or more animals that they had wanted to see, in response to the researcher asking the child if he or she had missed out on anything that he or she wanted to see or do at the zoo (see Appendix C, post-visit interview question 7); some of these animals were included in the individual children's pre-visit desires and hopes, while others were not mentioned by the individual children prior to the field trip. Second, several of the children acknowledged that they had not seen or done an element of their pre-visit agendas on the field trip when questioned about these agenda elements by the researcher (see Appendix C, post-visit interview question 5). Although two of these children did not offer any additional information on the topic, several others expressed feelings of sadness about these situations (which will be discussed in the next section), and two reconfirmed that they liked the activity or wanted to see the animal. Finally, two children raised the topic of something they wanted to do on the field trip but hadn't done in their post-visit interviews

without probing. The spontaneous declaration of these two children of missing out on a desired experience on the field trip suggests that these missed opportunities were especially significant to them. In the first such situation, Angela had a strong desire to see a cheetah prior to the field trip (as described in the vignette in section 4.2), and did not have the opportunity to see a cheetah on the field trip. She knew that there were cheetahs at the Toronto Zoo as she had seen them on a prior trip to the zoo, so she was aware that she had missed out on the opportunity to see them on the field trip. During her post-visit interview she raised her disappointment with this situation on her own, without prompting from the researcher:

Angela: And if I saw a cheetah, I would be so glad.

BL: Yeah, when we talked before you went, you said you wanted to see the cheetah, but did you get to see it?

Angela: No.

BL: No. Um, what do you think about that?

Angela: That's sad because I need to do my project on cheetahs.

Angela showed in this interchange that she was aware of the missed opportunity for both learning and enjoyment by not seeing the cheetahs at the zoo. In the second such situation, Rebecca expressed her enjoyment of seeing all the animals that she had seen at the zoo in a statement, "I liked all of them the most," and described many observations she had made about the animals she had seen. However, she also expressed her disappointment and realisation of her missed opportunity of satisfying both her general pre-visit agenda of seeing all the animals at the zoo and her specific pre-visit agenda of seeing a giraffe:

Rebecca: Um, I thought they had over one hundred animals. I didn't see any zebras.

BL: Oh, did you want to?

Rebecca: Yeah.

BL: Ah. So what do you think... [interrupted]

Rebecca: And giraffes.

In this passage, Rebecca expressed her disappointment at having missed out on seeing some of the animals she had expected to see at the zoo, including giraffes, but also zebras and the rest of the “one hundred” animals that she felt she hadn’t seen.

Overall, the majority of the children thought that they had missed out on something at the zoo that they had desired or hoped to do; therefore, these children did not engage in elements of their individual agendas for the field trip and they were aware of these missed experiences. Only three children expressed that they had not missed out on doing or seeing anything that they wanted to at the zoo.

#### **4.6.4.2 Feelings of sadness**

Several of the children verbally expressed feelings of sadness in their post-visit interviews to describe how they felt about having missed out on seeing an animal that they had wanted to see on the field trip, or in one case feeding an animal. The children made these expressions in response to the researcher’s questions regarding how they felt about not having seen an animal that was part of their pre-visit agenda, or in one case an animal that the child had declared having missed out on during the field trip, in their post-visit interviews. For example, individual children described feeling “sad” (Adam), “a little sad” (Jessica), “a bit sad” (Natalie), or “I wasn’t really happy” (Erin) at not having seen an animal that they had wanted to see on the field trip.

A more detailed example of a child's sad feelings about having missed out on an agenda element on the field trip came from Matthew regarding his pre-trip agenda of wanting to see a gorilla (as described in section 4.2.1). In his post-visit interview, Matthew expressed his sad feelings about having missed out on seeing the gorilla on the field trip:

BL: You also said before we went to the zoo, you said you wanted to see the gorillas. Did you get to do that?

Matthew: No.

BL: ... how did that make you feel that you didn't see it?

Matthew: Sad.

BL: Sad? Why?

Matthew: Because, 'cause I really wanted to see those ones and I never ever got to see them.

BL: Had you ever seen them before?

Matthew: No.

BL: So you were really looking forward to it

Matthew: Yeah. [quietly]

Interestingly, in many of these situations in which a child described or acknowledged having missed out on something during the field trip, the child proceeded to give a reason or explanation as to why he or she did not feel this was as bad a situation as it could appear. Specifically, several of the children who described feelings of sadness from having missed out on an element of their pre-visit agendas during the field trip also exclaimed, "but", and described a different experience that they had liked or enjoyed on the trip. These other experiences included seeing another animal that the child had wanted to see, or generally seeing a lot of other animals. The following illustrative interchange took place during Natalie's post-visit interview:

BL: Now before, when we talked before we went to the zoo you said you wanted to see a giraffe. Did you get to do that?

Natalie: No.

BL: No?

Natalie: But I did see tigers! And I wanted to see tigers, and I did!

In her pre-visit interview, Natalie had identified tigers and giraffes as the two types of animals that she was looking forward to seeing on the field trip. This passage shows that although she may have been disappointed at not having seen a giraffe, the opportunity to see the tiger, another element of her agenda, had made up for this missed opportunity, at least in part.

Furthermore, two of the children provided explanations as to why they were okay or not upset with having missed out on an animal that they had wanted to see on the field trip. Jessica explained that she was okay with not having seen belugas on the field trip (an element of her pre-visit agenda) because she had already seen one before. In the following excerpt from her post-visit interview, Kate provided a clear explanation as to why she was okay with having missed out on seeing the flamingos on the field trip:

BL: So did you miss out on anything that you really wanted to see or do at the zoo?

Kate: Uh. Yeah, I wanted to see the flamingos...

BL: Oh. How did you feel about not seeing them?

Kate: I didn't get upset, because I knew I'd see lots of other animals.

BL: Good

Kate: And they did say there's over a hundred animals and we might not get to see all of them.

BL: Who said that?

Kate: [Janet].

Therefore, although several of the children described feeling sadness as a result of missing out on elements of their agendas on the field trip, several appeared to draw on their personal and emotional resources to manage their feelings and focus on the positive aspects of their field trip experiences. These several children recognised a missed opportunity for an anticipated enjoyable experience on the field trip, and yet they expressed sentiments that this was okay or that another positive experience had helped to make up for that sadness or disappointment.

## **5 Discussion**

### **5.0 Overview**

This chapter describes the conclusions of the study and connects these conclusions with the research literature. It then discusses the context and limitations of the study. The implications of the study for the practice of teachers, informal educators, and researchers are then considered. Lastly, recommendations for future research are discussed.

### **5.1 Conclusions**

This section summarises and synthesises the findings of the study, and discusses these findings in reference to the research literature. The conclusions are presented succinctly initially, and then are elaborated upon in the subsequent paragraphs. The conclusions are discussed in order of the research questions they address: first those relating to the children's agendas for the field trip are discussed, followed by those relating to the factors that shaped their agendas, and finally those relating to the impacts of these agendas on their experiences and learning on the field trip.

- The children's agendas for the field trip each contained multiple elements.

The children had pre-visit agendas for the field trip that included desires and hopes, things they wanted, hoped, or looked forward to see or do on the field trip, as well as some expectations, of what would be at the zoo and how the field trip day would unfold. These two aspects of the children's agendas are consistent with two areas of Davidson's (2006) proposed model of children's perspectives of their field trips, namely what Davidson termed goals (what they hope will happen) and expectations (what they thought would happen). The

current study mainly generated understandings regarding the aspect of the desires and hopes in the children's pre-visit agendas.

The children's pre-visit agendas each included a combination of exhibit-based, activity-based, social, and/or affective elements. This is the first known classification of young children's agendas for a field trip presented in the literature. This finding builds on the studies of Lucas (1999, 2000), Balling et al. (as cited in Falk & Dierking, 2000), and Davidson (2006), who each reported aspects of the agendas of older children (in grades 4 to 8) for field trips. The current study revealed a new, more specific understanding that each child's field trip agenda was multifaceted and the elements within each individual agenda were more diverse than have been reported by these other studies. This multifaceted nature of the children's agendas is consistent also with the findings of studies on public visitor's agendas, which have described visitors' agendas as including exhibit-based, social, and entertainment components, among others (e.g., Adelman et al., 2000; Briseno-Garzon, 2005; Falk et al., 1998; McManus, 1992; Moussouri, 1997, 2003).

Interestingly, these young children did not include learning explicitly as a part of their pre-visit agendas for the field trip. This finding is not consistent with the assertions of Davidson (2006), Lucas (1999, 2000), and Balling et al. (as cited in Falk & Dierking, 2000) in that the older students in their studies had agendas and expectations of learning on their field trips. Balling et al. specifically reported that grade 4 children had school-related agendas of learning and meeting experts on the field trip, in addition to "child centered" (Falk & Dierking, 2000, p. 76) agendas, such as seeing exhibits. The children in the current study were not found to have pre-visit agendas of such a dual nature. Learning also has been found to be a part of public visitors' agendas for visits to informal education venues by many

studies (e.g., Adelman et al., 2000; Briseno-Garzon, 2005; Falk et al., 1998; Moussouri, 2003). In contrast, the children in the current study described their anticipated zoo experiences with respect to exhibits, activities, seeing, or doing, but not with respect to learning as these activities may be conceived and anticipated by older students and adults.

- The children's pre-visit agendas were unique and personal to each child.

The children had individual pre-visit agendas for the field trip that each included a unique combination of elements. Although there were some agenda elements that were common to several children, such as the desire or hope to see a tiger, the children expressed diverse desires, hopes, and expectations for the field trip. This individuality of the children's agendas is in harmony with the findings of Anderson et al. (2002) and Wolins et al. (1992) who found that children's recollections and memories of their field trip experiences were also unique and individual in nature.

- The children's pre-visit agendas included seeing animals on the field trip.

The children's pre-visit agendas universally included desires and hopes to see animals on the field trip. The prevalence of animals in these young children's field trip agendas is congruent with Davidson's (2006) finding that students' (grades 7 and 8) main goals for their field trips to zoos was seeing animals, and with the finding of Balling et al. (as cited in Falk & Dierking, 2000) that seeing animal exhibits was a part of the agendas of children (grade 4) for a field trip to a zoo.

The children's agendas all included elements of seeing specific types of animals, while several children's agendas also included more general desires or hopes of seeing many

animals. If compared with the agenda strategy classification schemes of Falk et al. (1998) and Moussouri (2003), many of the children in the current study could be considered to have had focused or fixed agendas with respect to seeing specific exhibits, while several children had moderately focused or flexible agendas that included both general and specific exhibit-based elements.

- Many of the children's pre-visit agendas included social elements of spending time with peers and/or parents/guardians.

The majority of the children had desires or hopes to spend time with people of importance to them on the field trip, namely friends and their own parents/guardians. The finding that several of the children included peers in their agendas is consistent with numerous studies that have highlighted the importance of spending time with peers in older children's (ages 9 and above) perspectives of their visits to informal education venues (e.g., Birney, 1988; Jensen, 1994), and for field trips in particular (e.g., Davidson, 2006; Griffin & Symington, 1997). On the other hand, the finding that several children's agendas included spending time with their parents/guardians expands the current understandings of children's perspectives of field trips; other studies of children's field trip perspectives and agendas have not reported this social element as a part of children's field trip agendas. Possibly, the young age of these children in the current study was integral to their hopes to spend time with their parents/guardians on the field trip.

- The children had positive anticipated feelings for the field trip.

The children's agendas included affective elements of feeling happy or excited, or of having fun on the field trip. These young children anticipated that this school-based field trip visit was going to be a positive event, a finding that is harmonious with Piscitelli and Anderson's (2001) findings of young children's perceptions of museums in general as happy, exciting places. Although studies of older children (ages 9 and above) have reported mixed findings regarding children's perspectives of their visits to informal education venues as fun or boring (Cox-Peterson et al., 2003; Davidson, 2006; Jensen, 1994), the current study found that these young children viewed this visit in a happy, excited light.

- The subgroup children constructed agendas during the field trip that included exhibit-based and social elements.

The subgroup children (whose experiences during the field trip were video recorded) appeared to continue to construct their agendas during the field trip. This finding is in harmony with the conceptions of Briseno-Garzon (2005) and Moussouri (1997, 2003) that family visitors to informal education venues construct their agendas prior to and throughout a visit. This finding also is congruent with the assertions of Anderson et al. (2007) that some agendas of young children emerge during their field trip experiences. The current study identified specific elements of agendas created by the subgroup children during the field trip as engaging with particular animal exhibits and interacting with their peers, the zoo educator, and, for one child, her parent/guardian.

- Some subgroup children appeared to have agendas to interact with the zoo educator during the field trip.

Some subgroup children appeared to have agendas to interact with the zoo educator on the field trip, particularly to listen to her, answer her questions, ask her questions, and share comments and stories with her. Interestingly, spending time with a zoo educator was only mentioned by one child in the case prior to the field trip, yet this social agenda element appeared to emerge as important to some of the subgroup children during the field trip. The importance to the subgroup children of interacting specifically with the zoo educator, and not just generally interacting with the adults present on the field trip, is further supported by the minimal interaction of the subgroup children with the parent/guardian chaperones who also were with them throughout the field trip (with the exception of the children of these parents/guardians).

Other studies of young children's field trips have suggested that informal educators can play important roles in the children's field trip learning and experiences (Anderson et al., 2002; Piscitelli & Weier, 2002; Wolins et al., 1992). Two studies that examined students' perspectives and feelings of their tours and talks with informal educators on field trips reported somewhat differing findings of students liking their tours, or finding the tours boring (Cox-Peterson et al., 2003; Davidson, 2006). The current study's finding, that the zoo educator appeared to be an important part of some of the children's agendas during the field trip, contributes to the understandings of the positive roles that informal educators can play in children's field trip experiences.

- The children's pre-visit agendas appeared to be shaped by multiple factors.

Each child's agenda appeared to be shaped by a combination of factors. Amongst all the children, these factors were identified as previous visit experiences to zoos and zoo-like venues, previous indirect experiences in the children's everyday lives with animals or the zoo, desires to see animals the children had never seen before, personal interests, prior knowledge, and school-related activities. This is the first known classification of the factors that can help to shape the agendas of children for a field trip.

The broad factors of prior experiences, knowledge, and interests with the venue, its subject matter, and similar venues, have been reported by other authors as factors that shape the agendas of public visitors (including children in Moussouri's, 1997, study) to informal education venues (Briseno-Garzon, 2005; Dierking & Falk, 1994; Falk & Dierking, 2000; Moussouri, 1997). Yet, several of the specific factors identified in the current study (i.e., prior experiences in the distinctive socio-cultural worlds of young children, the desire to see animals they had never seen before, interests in favourite animals, and school-related activities) could be viewed as more particular, or oriented, to young children.

- The children's prior experiences with zoos and zoo-like venues appeared to be a major factor in shaping their pre-visit agendas.

The children in this study were almost all experienced zoo visitors, and their prior experiences with the Toronto Zoo and other zoos and zoo-like venues appeared to play an important role in shaping their pre-visit agendas for the field trip. The children's pre-visit agendas included seeing exhibits at the zoo that they had seen, enjoyed, and/or remembered on previous visits to zoos and zoo-like venues. These previous visits were most often taken

with family members, which points to the important role of family experiences in the children's agendas for this school-based field trip visit.

- Prior indirect experiences with animals or the zoo in their everyday lives appeared to shape the majority of the children's pre-visit agendas.

The previous indirect experiences of the majority of the children with animals through books, television, toys, computers, or cultural symbols, appeared to play a role in shaping their field trip agendas. Many of these indirect experiences were specified, or could be assumed, to have taken place at home (or in other non-school-based aspects of the children's lives). This finding complements the assertions of Anderson et al. (2002) and Piscitelli and Anderson (2001) regarding the important role played by young children's socio-cultural worlds in their visits to informal education venues. Piscitelli and Anderson suggested that links between young children's visit experiences and their socio-cultural worlds play a role in mediating their visit learning and memories, while the current study suggests that young children's experiences in their socio-cultural worlds also play a role in shaping their field trip agendas even before they arrive at the venue.

A unique finding reached with one child in the study was that time spent learning about the zoo on the internet shaped her expectations of what was going to be at the zoo. This experience provided this child, who had never visited a zoo before, with information about the field trip venue itself. Previous studies also have described that prior information about the informal education venue is another factor that can influence public visitors' agendas (Briseno-Garzon, 2005; Falk & Dierking, 1992; Moussouri, 1997).

- Personal interests in animals appeared to shape the majority of the children's pre-visit agendas.

The majority of the children's personal interests in favourite animals appeared to play a role in shaping their agendas to see these animals on the field trip. This finding is congruous with the finding of Balling et al. (as cited in Falk & Dierking, 2000) that the zoo field trip agendas of children included seeing favourite animals; Jensen (1994) also found more generally that children want to look at things of interest to them on visits to informal education venues. The children in the current study also described knowledge and prior experiences surrounding these personal favourite animals, which is consistent with the concept of islands of expertise that children build around topics of their own interest proposed by Crowley and Jacob (2002). If considered in light of Crowley and Jacob's concept, these children could have been building islands of expertise surrounding animals of their own interest, and their agendas to see the animals on the field trip potentially fit into this building process.

- School-related activities did not appear to play a major role in shaping the children's pre-visit agendas.

There was a notable lack of reference to school-related activities by the majority of the children when talking about their pre-visit agendas for the field trip. The extensive pre-visit activities and orientation in the classroom were not found to play a role in shaping the majority of the children's expressed pre-visit agendas. This finding is complementary to the assertion of Anderson et al. (2002) that few of the young children in their study made

connections between their field trip experiences and their related classroom-based activities when talking about their field trips after the fact.

Pre-visit orientations in particular have been acclaimed for their potential to inform and prepare students for field trips (e.g., Balling, Falk, & Aronson, 1980; Falk & Dierking, 2000; Orion & Hofstein, 1994). Yet, in the current study only one child provided any indication of referring to the pre-visit orientation when discussing his agenda for the field trip. Rather, the children in the current study appeared to draw from their past experiences with animals and at zoos with their families and in their everyday lives, when constructing their field trip agendas. Thus, this study generated the interesting understanding that factors which were related to the children's experiences and interests at home and in other aspects of their lives appeared more important than school-related factors in shaping their agendas for the field trip.

Interestingly, an assigned homework project to study one animal of the child's own choice was the one school-related activity that was referred to by more than one child which connected to their pre-visit agendas for the field trip. Even though the animal project was not an assignment for the field trip, it appeared to contribute to focusing the agendas of three children on the specific animal they had chosen to study for their project. Griffin and Symington (1997) and Griffin (1998) recommended a field trip pedagogical practice that relates to this finding; these authors recommended that teachers assign children the task of choosing and developing their own questions and areas of inquiry on the field trip (such as investigating a particular group of animals), in order to make field trips more learner-oriented.

- The subgroup children's agendas appeared to be shaped during the field trip by the field trip program and advance sources of information at the zoo.

The subgroup children's agendas continued to be shaped during the field trip. This finding is consistent with the assertions of Moussouri (2003) and Briseno-Garzon (2005) that families' agendas are continuously shaped and refined on visits to informal education venues. Two factors were found to shape subgroup children's agendas to engage with particular animal exhibits at the zoo: (a) the field trip program, and more specifically the exhibits included in, and routes of the animal tours; and (b) advance information provided to the children by announcements made by the zoo educator and zoo signs. These factors informed the subgroup children of the possibility of engaging with an animal exhibit or other zoo activity. These factors were mostly (with the exception of the zoo signs) specific to the nature of the field trip visit in which the program and activities were pre-planned and led by an informal educator.

Furthermore, the subgroup children's agendas to engage with particular animal exhibits shown during the field trip likely were shaped by these factors in conjunction with such personal factors as the individual interests, prior experiences, and prior knowledge of each individual child, which played roles in shaping the children's agendas prior to the visit. This speculation is consistent with Briseno-Garzon's (2005) conception that the agendas of the families in her study were shaped during their visits by the families' development of new interests to see exhibits and learn about topics as they proceeded through their visits (what she termed "intrinsic factors" [p. 110]).

- Many rewarding experiences of learning, enjoyment, and/or engagement resulted from the children seeing animals that were part of their pre-visit agendas for the field trip.

Almost all of the children in the study described that they had seen or done elements of their exhibit-based, pre-visit agendas on the field trip. These children described rewarding experiences of learning (in the cognitive, affective, and/or emotional dimensions), enjoyment, or both, from seeing animals that were part of their pre-visit agendas for the field trip. Additionally, several of the subgroup children were observed to have positive or engaging experiences on the field trip while seeing animals that were part of their pre-visit agendas. Although previous studies have identified various aspects of field trips that help to support young children's learning (e.g., Anderson et al., 2002; Fivush et al., 1984; Piscitelli & Weier, 2002; Reynolds, 1984; Watson et al., 2002; Wolins et al., 1992), this is the first known study to report the rewarding learning and experiences that can come from young children's engagement in their personal field trip agendas. This finding contributes new understandings to the literature regarding the possible positive impacts of children's field trip agendas and the types of field trip experiences that can support and lead to children's learning.

- Only a small number of the children reported having important experiences relating to their social agendas on the field trip.

Although the majority of the children expressed having social agendas prior to the field trip, few described experiences relating to their social agendas on the field trip to the researcher after the trip. Similarly, although all the subgroup children appeared to show social agendas during the field trip, only a few mentioned any of these social interactions

after the trip. The children's lack of mention of their social experiences may have been in part due to the researcher's minimal probing about this aspect of the children's agendas and experiences in the post-visit interviews. However, it could also suggest that the children's social agendas and experiences were not as important or memorable to them as other aspects of their field trip experiences. This latter explanation is not consistent with the findings of other studies regarding the importance of peers in the perspectives of older students (grades 6 to 8) of their field trip experiences (e.g., Birney, 1988; Davidson, 2006; Griffin & Symington, 1997). Nevertheless, the younger age of the children in the current study could possibly offer an explanation for the differences in findings with these other studies.

A small number of the children in the study stand out as appearing to have had important experiences engaging in their social agendas on the field trip, including with a parent/guardian, a peer, and, for two, with the zoo educator. These children reported learning or enjoyment from engaging in these social agendas that they expressed having, or were deemed to have. Although infrequent amongst the children in the case, these few children's comments show the important role that engaging in social agendas can potentially play in children's field trip learning and experiences.

- The children appeared to have constructed agendas of seeing exhibits during the field trip that resulted in unexpected, yet rewarding experiences.

Several of the children described rewarding experiences on the field trip which they had not expected to see or do. These unexpected experiences appear to have become part of the children's agendas during the field trip, when they presented themselves at the zoo. These agendas formed during the field trip appear to have resulted in memorable experiences

for these children, and for several children led to learning and enjoyment. This finding is congruent with the suggestion of Anderson et al. (2007) that some agendas of young children emerge during their visits, and contributes new understandings regarding how these agendas can contribute positively to children's learning and field trip experiences.

- When children followed their own agendas to look at exhibits away from the group, they potentially engaged in rewarding experiences on the field trip.

The subgroup children were observed stopping along the route of the tour or moving away from the tour group to look at other exhibits during the field trip. In these situations of following their own agendas, the children were potentially exploring and learning about exhibits of interest to them, though they simultaneously were missing out on aspects of the field trip program. Anderson et al. (2007) also described episodes when children had agendas that were different than those of the field trip venue and its educator (which they termed competing agendas), although the Anderson et al. (2007) study did not describe the exact type of situation found in the current study of children following agendas to look at various exhibits away from the program tour. Anderson et al. (2007) pointed out that situations of competing agendas potentially can affect children's learning from their visit experiences. The current study found that from the perspectives of two children, their moments of following their own agendas to look at other exhibits away from the group constituted interesting experiences for them.

- Many of the children felt that they had missed out on elements of their agendas during the field trip, and some had feelings of sadness about these circumstances.

The majority of the children did not engage in one or more elements of their agendas during the field trip. The majority of the children recognised they had missed out on an experience when they didn't get to see or do an element of their own agendas, and several expressed feelings of sadness as a result of these situations. This finding contributes new understandings to the literature regarding young children's own perspectives and feelings of having missed out on seeing or doing something of their own personal agendas on the field trip. These understandings are, however, harmonious with the findings of other studies which found that older children (in grades 4 and above) want choice and control over their activities on field trips and dislike being restricted from being able to freely follow their own interests (Davidson, 2006; Griffin & Symington, 1997; Jensen 1994). Yet, interestingly, this study also found that many children in this study also described other positive experiences on the field trip that had helped make up for these situations of missing out on an element of their agendas, or gave explanations as to why they were not upset about these situations. The children's own perspectives of having missed out on aspects of their agendas were not as negative as might be expected.

One further impact of these situations of children missing out on elements of their agendas is that they represent missed potential opportunities for learning and enjoyment by the children. The kinds of rewarding experiences of learning and enjoyment reported by many of the children from engaging in elements of their agendas in this study provide evidence of the types of rewarding experiences that could have emerged from the field trip if the children had been given the opportunity to engage in these missed agenda elements.

Anderson et al. (2007) proposed a similar conclusion that richer experiences and learning could have come from the visit experiences of the children in their study if the children's agendas had been incorporated into the field trip.

## **5.2 Limitations and context of the study**

The characteristics and context of this case study both allowed for, and limited, the findings and conclusions of the study. This study allowed the researcher to generate understandings of the agendas, experiences, and learning of a particular group of grade 1 and 2 children in the context of a particular field trip to a workshop program at the Toronto Zoo. As discussed in chapter 2, the researcher did not draw generalisations from this case and it is left to the readers to make naturalistic or reader generalisations from the findings and conclusions of this study (Merriam, 1998; Stake, 1995). Furthermore, the case studied was bounded by a time frame that extended to only days after the field trip visit. Learning from visits to informal education venues is understood to continue long after the visit (Falk & Dierking, 2000; Rennie & Johnston, 2004). Thus, the longer term impacts of the children's field trip agendas and agenda-related experiences were not explored by this study.

Another area of context of the study was the researcher's presence in the case and the identity of the researcher herself. The researcher took on a participant observer role in this study and developed a rapport with the individual participants in the study. Thus, the researcher was a part of the case studied through her presence and participation in the study setting. Furthermore, the participants responded to, and interacted with, the particular researcher (and research assistant) who conducted this study; the researcher's identity, and the ways in which the participants perceived her, influenced their interactions and

consequently influenced the data collected in the study (Angrosino & Mays de Perez, 2000). Interviews in particular are described as negotiated interactions that are shaped by both the interviewee and the interviewer (Fontana & Frey, 2000). Therefore, the findings generated by this study were contextualised within, and shaped by the situation and interactions that were co-created between the participants and the researcher (Angrosino & Mays de Perez, 2000; Fontana & Frey, 2000).

The researcher brought a personal history and identity of experiences, values, assumptions, and biases to the study, and it was through this personal perspective that she viewed the case. In qualitative research, "*The researcher is the primary instrument for data collection and analysis*" (Merriam, 1998, p. 7). Therefore, although the researcher endeavoured to recognise, clarify, and report her personal perspective, the researcher and her perspective may have introduced bias into the collection and analysis of the data (Merriam, 1998; Ponterotto, 2005). A different researcher could have collected and created a different set of data and interpretations in this study. Furthermore, Fine and Sandstrom (1988) note that an adult researcher's perspective can make it particularly difficult for the researcher to interpret and understand the meanings and experiences of children, as the researcher views the children and their worlds from an adult point of view.

The data collection methods and procedures used in this study had their own specific limitations. First, individual interviews can be problematic as interviewees can be influenced by the power relations involved in answering the questions of an interviewer; this power imbalance can be pronounced in an interview situation with an adult interviewer and a child interviewee (Brooker, 2001; Gollop, 2000; Hatch, 1990; Kellett & Ding, 2004). The researcher's role in the field and the interview protocols and procedures were devised to

minimise such problems (see sections 3.6, 3.7, and 3.9); however, the children could have felt pressure to give the “right” answer, could have been impressionable to any suggestibility on the part of the researcher, or could have felt obliged to respond to questions even when they didn’t know the answer, in the interviews (Cameron, 2005; Hatch, 1990; Kellett & Ding, 2004). Second, although the parent/guardian questionnaires were intended to gather information about the children’s knowledge, experiences, and interests in zoos and animals prior to the field trip, some of the responses provided by the participants obviously had been influenced by the field trip itself. Therefore, some of the information collected with the questionnaires was unclear. Additionally, not all of the questionnaires were returned to the researcher. Consequently, the questionnaires did not generate as rich data about the children as was intended. Third, as the post-visit drawing activity was done by the whole class at once, the children could have been influenced by the drawings of other nearby children in selecting the subject of their drawing (this potential circumstance was noted for one pair of children). Lastly, the video recording of the field trip produced a large amount of data but also was limited to the field of view and sound of the camera in capturing the field trip events. The children’s busy movement during the field trip made it impossible to capture the activities of all of the eight subgroup children at all times during the field trip, and hence the video recording of each subgroup child’s field trip experiences was incomplete. Additionally, the video recording of only eight children on the field trip (who were all within one tour group) left the field trip experiences of the other children unknown, particularly those of the children in the other tour group.

### 5.3 Implications and recommendations

The findings and conclusions of this study suggest some implications for the practice and study of field trips by teachers, informal educators, and researchers. Although the findings of this case study were not generalised by the researcher beyond the context of the study, they suggest some practices that may be useful to consider when designing, preparing for, facilitating, and following up on field trips for young children. The implications of the study are discussed in the following six points.

1. The findings of this study suggest that young children can have their own agendas for field trips which they start to construct prior to the trips. Teachers, informal educators, and researchers could listen to and value children's voices and perspectives of field trips by taking steps to learn about the children's agendas prior to upcoming field trips. Teachers might consider learning about the agendas of the children in their classes by asking them particularly about what they want or hope to do on the field trip. Communication between teachers and field trip venues prior to field trips could allow teachers to share the information they gather regarding their students' agendas with the appropriate informal educators. Furthermore, or alternatively, informal educators could question children at the beginning of field trips to learn about their desires, hopes, and expectations for the field trip. Anderson et al. (2007) similarly recommended that teachers or informal educators talk with children about their agendas before, or at the beginning of, a field trip. Finally, researchers need to view young children as important stakeholders in field trips who have their own agendas and perspectives of their field trip experiences. Researchers need to listen to the voices of the young children themselves in their endeavours to study and understand field trips.

2. The findings of this study suggest that a variety of factors can shape young children's field trip agendas prior to trips; school-based activities could play minimal roles in shaping these agendas, while previous visits to the field trip venue, experiences in their homes and everyday lives with the subject of the venue, and personal interests could play more significant roles. Teachers and researchers who would like to understand what children want and hope to do on a field trip might consider providing children with opportunities to talk about these non-school-related factors that could shape the children's field trips agendas. Furthermore, teachers could consider incorporating this type of discussion into their endeavours to prepare children for field trips. For example, as prior visit experiences to the venue were found to be a particularly important and universal factor that shaped the children's agendas in this study, teachers might provide children with opportunities to discuss their prior visit experiences in a pre-visit orientation and then clarify with the children which of these experiences they will be participating in on the field trip. Although in this study the pre-visit orientation was not found to be a factor that shaped the children's field trip agendas, this type of preparatory discussion potentially could help children focus on agenda elements that they will have the opportunity to engage in on a field trip.

3. The findings of this study suggest that rewarding experiences of learning and enjoyment can emerge when children engage in elements of their own agendas on field trips. Teachers, informal educators, and researchers might consider how to support and capitalise on the potential importance and benefits of these types of field trip experiences for children.

Field trip programs that incorporate children's agendas could facilitate the kinds of rewarding learning experiences that came from some of the children's experiences of engaging in their agendas in this study, and avoid the kinds of feelings of missing out and sadness that came from some of the children's situations of not engaging in elements of their agendas. Informal educators could consider designing flexible field trip programs with alternate tour routes, exhibits, or activities, which could be constructed or tailored to try to meet the agendas of each class or group of children while still meeting the goals of the program. Alternatively, teachers and educators could choose to involve children in co-creating field trip programs that meet both their agendas and the purposes of the teacher and field trip venues. This recommendation, also made by Anderson et al. (2007), values and recognises the children as active partners and co-constructors in their field trip experiences. Similarly, other researchers also have argued that incorporating children's perspectives when designing and facilitating field trip experiences could help children build on their own interests and knowledge (Cox-Peterson et al., 2003; Griffin, 1998, 2004; Griffin & Symington, 1997; Middlebrooks, 1999; Olson, 1999). Additionally, teachers and informal educators could consider incorporating time for free exploration in small groups into field trip programs. The diversity of children's agendas within a class could make it difficult to meet the agendas of all the children, and free exploration would allow for some differentiation of a field trip and could provide opportunities to meet more of the unique agendas of the children in a class.

4. The study's findings suggest that children can continue to construct their agendas during field trips. Teachers and informal educators could capitalise on the unexpected and

rewarding experiences that may arise when children engage in these agendas by being aware of, and responsive to, agenda elements formed by children during a field trip. Teachers and informal educators might consider responding to the agendas shown by children during the field trip by flexibly modifying the time spent engaging with the program exhibits or activities, or incorporating other exhibits or activities along the route of a program into field trip activities, as children show an interest in them. Price and Hein (1991) and Anderson et al. (2007) similarly recommended that field trip programs and plans incorporate the flexibility to change activities in response to children's interests. The study's findings also suggest that young children's agendas during field trips can be shaped by announcements made by educators. Endeavours by informal educators and teachers to provide children with advance information about the upcoming exhibits and activities during the field trips could help shape children's emergent agendas and stimulate interest and excitement about the upcoming activities.

5. The findings of this study suggest that children can learn in areas of their own agendas and interest on field trips; in this study, rewarding learning experiences came from engaging with exhibits that formed a part of children's agendas prior to the field trip and exhibits that emerged as part of their agendas during the field trip. Teachers could capitalise on children's unique field trip agenda-related learning and experiences by using these areas of interest as launching points for new directions of independent classroom learning and investigation by the children after the visit.

6. The study's findings suggest that informal educators, parent/guardian chaperones, and peers can be a memorable part of young children's field trip agendas and experiences. These potentially important agendas could be considered and capitalised on in the design, facilitation, and study of field trips.

Endeavours to encourage interactions between children and informal educators on field trips could help to make the most of children's potential desires to interact with these educators. Informal educators should be aware of the important role they can play in children's agendas during field trips, and could capitalise on these agendas by actively inviting and encouraging children to talk, ask questions, and share interests and ideas with them.

The potential role and involvement of parents/guardians in the field trip agendas and experiences of their young children also should be recognised and supported. Teachers and informal educators could try to ensure that children have opportunities to spend time with their own parents/guardians on field trips, and encourage their interactions beyond the chaperones' logistical roles of supervision. However, teachers, informal educators, and researchers should be aware that, in this study, this role appeared to be relevant only to children whose parents/guardians attended the field trip.

Similarly, endeavours by teachers and informal educators to facilitate interactions between children and peers of their own choosing on field trips could help to recognise and support children's desires and hopes to spend time with peers.

## **5.4 Recommendations for future research**

### **5.4.1 Recommendations for research methods**

Based on the researcher's experiences in conducting this study, the following recommendations can be made for future studies regarding research methods. First, when conducting the interviews in this study, the researcher was expecting great competence and expressive voices from the children (in congruence with the view of children of this study). Even still, the researcher was impressed by the keenness of the children's insights and the strength of their abilities in thinking through and expressing their ideas. It is recommended that researchers ask open interview questions and keep open attitudes when talking with children of this age, so as to value and document their perspectives and ideas as fully as possible.

Second, video recording groups of four children with each video camera during the field trip proved to be a difficult endeavour due to the children's constant movement. Researchers who are considering video recording children on field trips should consider planning to follow only one or two children with each video camera.

Third, the video playback sections of the post-visit interviews (see section 3.7 and Appendix C) did not prove as useful in gaining insights into the subgroup children's experiences as the researcher had hoped. Some of the children had already discussed aspects of the selected video episodes in their post-visit interviews before the video playback section of the interviews, which suggests that they did not need the visual reminder to describe these experiences. Furthermore, some children had difficulty recognising what was happening in the video playback episodes, possibly because of the somewhat low quality of the sound and images recorded with hand-held cameras in the noisy zoo environment. Researchers who are

considering using a video playback method should give thought to how they can take a clear video recording of the children's experiences, and make sure they have adequate time in the interviews to watch and possibly re-watch the episodes.

### **5.3.2 Recommendations for future areas of study**

This study examined a single field trip case, and therefore it is left to future studies to examine the agendas of young children for field trips with different groups of children in other contexts. It could be valuable to study the agendas of young children for field trips to other types of informal education venues such as museums and art galleries, whose subject matter children may have less familiarity with, or interests in, than the animals of a zoo. Furthermore, almost all the children in this study had visited a zoo prior to the field trip, and most had visited the Toronto Zoo in particular, and these prior visit experiences were an important factor in shaping their field trip agendas. Future studies could investigate children's field trip agendas and the factors that shape these agendas for children who have not previously visited the field trip venue. Finally, it could be interesting to examine young children's agendas, and the impacts of these agendas, in field trip contexts in which the children are involved in co-constructing the field trip program with their teachers and the informal educators.

Furthermore, as described in section 5.2, this study examined the impacts of children's agendas in a period of time of only days after the field trip. It could be valuable to examine children's learning and memories from a field trip over a longer period of time to try to understand how the children's agenda-related learning and experiences are reconstructed and reconsidered by the children in the classroom and in their homes.

Furthermore, it could be interesting to examine if and how children draw from their experiences from a field trip to construct agendas for future visits to the field trip venue, as has been examined for families' visit agendas by Briseno-Garzon (2005) and Moussouri (1997).

Several interesting issues were raised in the findings of this study that could be investigated further in future studies. This study raised an interesting emergent theme regarding the place of young children's parents/guardians in their field trip agendas. A deeper study of young children's agendas to spend time with their parent/guardian chaperones on field trips could yield interesting understandings of young children's field trip perspectives and experiences. It also could be interesting to examine the social agendas of children of different ages for field trips, to examine whether this emergent theme is more prevalent or important with younger children. Furthermore, future studies could investigate further the factors that shape young children's field trip agendas to examine more deeply the emergent finding of this study of the differing roles of home-based versus school-related factors in this shaping process.

This study leaves unsettled the issue of the importance and impact of young children's social agendas in their field trip experiences. Future studies could examine more deeply the agendas of young children of interacting with the zoo educator, parent/guardian chaperones, and peers on field trips, and the types of experiences and learning that come from engaging in these agendas.

Finally, this study focused on the children's agendas for the field trip with little consideration for the agendas of the other stakeholders in the field trip, namely the teacher, informal educator, and parent/guardian chaperones. In a recent study, Davidson (2006)

looked at the perspectives of older students (grades 7 and 8), teachers, and informal educators for field trips to zoos and identified areas of match and mismatch between the perspectives. Future studies could examine the agendas of all the stakeholders for young children's field trips to examine the impacts of these agendas, and the interplay of these agendas, on the children's field trip experiences.

## References

- Adelman, L. M., Falk, J. H., & James, S. (2000). Impact of National Aquarium in Baltimore on visitors' conservation attitudes, behavior, and knowledge. *Curator*, 43, 33-62.
- Anderson, D. (1998, August). An analysis of the importance of informal and formal science learning contexts to each other: An overview perspective. Paper presented at the Learning Science in Informal Contexts Conference, Canberra, Australia.
- Anderson, D., Kisiel, J., & Storksdieck, M. (2006). Understanding teachers' perspectives on field trips: Discovering common ground in three countries [Electronic version]. *Curator*, 49, 365-386.
- Anderson, D., & Lucas, K. B. (1997). The effectiveness of orienting students to the physical features of a science museum prior to visitation. *Research in Science Education*, 27, 485-495.
- Anderson, D., Lucas, K. B., Ginns, I. S., & Dierking, L. D. (2000). Development of knowledge about electricity and magnetism during a visit to a science museum and related post-visit activities [Electronic version]. *Science Education*, 84, 658-679.
- Anderson, D., Piscitelli, B., & Everett, M. (2007). *Competing agendas: Young children's museum field trips*. Manuscript submitted for publication.
- Anderson, D., Piscitelli, B., Weier, K., Everett, M., & Tayler, C. (2002). Children's museum experiences: Identifying powerful mediators of learning. *Curator*, 45, 213-231.
- Anderson, D., & Shimizu, H. (2007). Factors shaping vividness of memory episodes: Visitors' long-term memories of the 1970 Japan World Exposition [Electronic version]. *Memory*, 15, 177-191.
- Angrosino, M. V., & Mays de Perez, K. A. (2000). Rethinking observation: From method to context. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 673-702). Thousand Oaks, CA: Sage Publications.
- Balling, J. D., Falk, J. H., & Aronson, R. A. (1980). *Pre-trip orientations: An exploration of their effects on learning from a single field trip to a zoological park* (Final Report, Grant No. SED77-18913). Washington, DC: National Science Foundation.
- Beiers, R. J., & McRobbie, C. J. (1992). Learning in interactive science centres. *Research in Science Education*, 22, 38-44.
- Bernard, H. R. (1994). *Research methods in anthropology: Qualitative and quantitative approaches* (2nd ed.) Walnut Creek, CA: AltaMira Press.

- Billman, J., & Sherman, J.A. (1996). *Observation and participation in early childhood settings: A practicum guide*. Boston: Allyn and Bacon..
- Birney, B. A. (1988). Criteria for successful museum and zoo visits: Children offer guidance. *Curator*, 31, 292-316.
- Bitgood, S. (1989). School field trips: An overview. *Visitor Behavior*, 4(2), p. 3-6.
- Bowker, R. (2002). Evaluating teaching and learning strategies at the Eden Project [Electronic version]. *Evaluation and Research in Education*, 16, 123-135.
- Briseno-Garzon, A. (2005). *Adult learning experiences from an aquarium visit: The on-site and longitudinal roles of personal agendas and social interactions in family groups*. Unpublished master's thesis, The University of British Columbia, Vancouver, British Columbia, Canada.
- Brooker, L. (2001). Interviewing children. In G. Mac Naughton, S. Rolfe, & I. Siraj-Blatchford (Eds.), *Doing early childhood research: International perspectives on theory and practice* (pp. 162-177). Buckingham, England: Open University Press.
- Cameron, H. (2005). Asking the tough questions: A guide to ethical practices in interviewing young children [Electronic version]. *Early Child Development and Care*, 175, 597-610.
- Chapman, D. (2005). *Math Interview*. Unpublished manuscript.
- Cobb, P. (1994). Where is the mind? Constructivist and sociocultural perspectives on mathematical development [Electronic version]. *Educational Researcher*, 23(7), 13-20.
- Combs, A. A. (1999). Why do they come? Listening to visitors at a decorative arts museum. *Curator*, 42, 186-197.
- Cox-Peterson, A. M., Marsh, D. D., Kisiel, J., Melber, L. M. (2003). Investigation of guided school tours, student learning, and science reform recommendations at a museum of natural history [Electronic version]. *Journal of Research in Science Teaching*, 40, 200-218.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Crowley, K., & Jacobs, M. (2002). Building islands of expertise in everyday family activity. In G. Leinhardt, K. Crowley, & K. Knutson (Eds.), *Learning conversations in museums* (pp. 333-356). Mahwah, NJ: Lawrence Erlbaum Associates.
- Csikszentmihalyi, M., & Hermanson, K. (1995). Intrinsic motivation in museums: Why does one want to learn? In J. H. Falk & L. D. Dierking (Eds.), *Public institutions for personal*

- learning: Establishing a research agenda* (pp. 67-77). Washington, DC: American Association of Museums.
- Darbyshire, P., Schiller, W., & MacDougall, C. (2005). Extending new paradigm childhood research: Meeting the challenges of including younger children [Electronic version]. *Early Child Development and Care*, 175, 467-472.
- Davidson, S. K. (2006). *Student perspectives on their school trips to zoos*. Unpublished doctoral dissertation, University of California, Davis.
- Davis, J., & Gardner, H. (1993). Open windows, open doors. *Museum News*, 72(1), 34-58.
- DeMarie, D. (2001). A trip to the zoo: Children's words and photographs. *Early Childhood Research and Practice*, 3(1), Article 1. Retrieved July 26, 2005, from <http://ecrp.uiuc.edu/v3n1/demarie.html>
- Dierking, L. D. (2002). The role of context in children's learning from objects and experiences. In S. G. Paris (Ed.), *Perspectives on object-centered learning in museums*, (pp 3-18). Mahwah, NJ: Lawrence Erlbaum Associates.
- Dierking, L. D., & Falk, J. H. (1994). Family behaviour and learning in informal science settings: A review of the research. *Science Education*, 78, 57-72.
- Driver, R., Asoko, H., Leach, J., Mortimer, E., & Scott, P. (1994). Constructing scientific knowledge in the classroom [Electronic version]. *Educational Researcher*, 23(7), 5-12.
- Edwards, C., Gandini, L., & Forman, G. (Eds.). (1998). *The hundred languages of children: The Reggio Emilia approach – advanced reflections* (2nd ed.). Westport, CT: Ablex Publishing.
- Falk, J. H., & Adelman, L. M. (2003). Investigating the impact of prior knowledge and interest on aquarium visitor learning [Electronic version]. *Journal of Research in Science Teaching*, 40, 163-176.
- Falk, J. H., & Balling, J. D. (1982). The field trip milieu: learning and behavior as a function of contextual events. *Journal of Educational Research*, 76, p. 22-28.
- Falk, J. H., & Dierking, L. D. (1992). *The museum experience*. Washington, DC: Whalesback Books.
- Falk, J. H., & Dierking, L. D. (1997). School field trips: Assessing their long-term impact. *Curator*, 40, 211-218.
- Falk, J. H., & Dierking, L. D. (2000). *Learning from museums: Visitor experience and the making of meaning*. Walnut Creek, CA: Alta Mira Press.

- Falk, J. H., Moussouri, T., & Coulson, D. (1998). The effect of visitors' agendas on museum learning. *Curator*, 41, 106-120.
- Fine, G. A., & Sandstrom, K. L. (1988). *Knowing children: Participant observation with minors*. Newbury Park, CA: Sage Publications.
- Fivush, R., Hudson, J., & Nelson, K. (1984). Children's long-term memory for a novel event: An exploratory study. *Merrill-Palmer Quarterly*, 30, 303-316.
- Flewitt, R. (2005). Conducting research with young children: Some ethical considerations [Electronic version]. *Early Child Development and Care*, 175, 553-565.
- Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 645-672). Thousand Oaks, CA: Sage Publications.
- Gennaro, E. D. (1981). The effectiveness of using previsit instructional materials on learning for a museum field trip experience. *Journal of Research in Science Teaching*, 18, 275-279.
- Gergen, K. J. (1995). Social construction and the educational process. In L. P. Steffe & J. Gale (Eds.), *Constructivism in education* (pp. 17-39). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gilbert, J., & Priest, M. (1997). Models and discourse: A primary school science class visit to a museum [Electronic version]. *Science Education*, 81, 749-762.
- Gollop, M. M. (2000). Interviewing children: A research perspective. In A. B. Smith, N. J. Taylor, & M. M. Gollop (Eds.), *Children's voices: Research, policy, and practice* (pp. 18-36). Auckland, NZ: Pearson Education New Zealand.
- Gottfried, J. (1980). Do children learn on school field trips? *Curator*, 23, 165-174
- Graue, E. M., & Walsh, D. J. (1998). *Studying children in context: theories, methods, and ethics*. Thousand Oaks, CA: Sage Publications.
- Griffin, J. (1998). Learning science through practical experiences in museums. *International Journal of Science Education*, 20, 655-663.
- Griffin, J. (2004). Research on students and museums: Looking more closely at the students in school groups [Electronic version]. *Science Education*, 88(S1), S59-70.
- Griffin, J., & Symington, D. (1997). Moving from task-oriented to learning-oriented strategies on school excursions to museums. *Science Education*, 81, 763-779.

- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage Publications.
- Harcourt, D., & Conroy, H. (2005). Informed assent: Ethics and processes when researching with young children [Electronic version]. *Early Child Development and Care*, 175, 567-577.
- Hatch, J. A. (1990). Young children as informants in classroom studies. *Early Childhood Research Quarterly*, 5, 251-264.
- Haverkamp, B. E. (2005). Ethical perspectives on qualitative research in applied psychology [Electronic version]. *Journal of Counseling Psychology*, 52, 146-155. Retrieved March 28, 2007, from PsycARTICLES database.
- Hein, G. E. (1998). *Learning in the museum*. London: Routledge.
- Jensen, N. (1994). Children's perceptions of their museum experiences: A contextual perspective. *Children's Environments*, 11, 300-324.
- Kellet, M., & Ding, S. (2004). Middle childhood. In S. Fraser, V. Lewis, S. Ding, M. Kellett, & C. Robinson (Eds.), *Doing research with children and young people* (pp. 161-174). London, England: Sage Publications.
- Kendrick, M., & McKay, R. (2004). Drawings as an alternative way of understanding young children's constructions of literacy [Electronic version]. *Journal of Early Childhood Literacy*, 4, 109-128.
- Kindler, A. M. (1997). Aesthetic development and learning in art museums: A challenge to enjoy. *Journal of Museum Education*, 22(2&3), 12-16.
- Kindler, A. M., & Darras, B. (1997). Young children and museums: The role of cultural context in early development of attitudes, beliefs, and behaviors. *Visual Arts Research*, 23(1), 125-141.
- Kisiel, J. F. (2003). Teachers, museums and worksheets: A closer look at a learning experience [Electronic version]. *Journal of Science Teacher Education*, 14, 3-21.
- Kisiel, J. (2005). Understanding elementary teacher motivations for science fieldtrips [Electronic version]. *Science Education*, 89, 936-955.
- Kisiel, J. (2006). An examination of fieldtrip strategies and their implementation within a natural history museum [Electronic version]. *Science Education*, 90, 434-452.

- Korpan, C. A., Bisanz, G. L., Bisanz, J., Boehme, C., & Lynch, M. A. (1997). What did you learn outside of school today? Using structured interviews to document home and community activities related to science and technology. *Science Education*, 81, 651-662.
- Kortesluoma, R., Hentinen, M., & Nikkonen, M. (2003). Conducting a qualitative child interview: Methodological considerations [Electronic version]. *Journal of Advanced Nursing*, 42, 434-441.
- Kubota, C. A., & Olstad, R. G. (1991). Effects of novelty-reducing preparation on exploratory behavior and cognitive learning in a science museum setting. *Journal of Research in Science Teaching*, 28, 225-234.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage Publications.
- Lucas, K. B. (1999, November). *When Mr. Jones took grade 5 to the Sciencentre*. Paper presented at the Australian Association for Research in Education conference, Melbourne, Australia. Retrieved December 23, 2004, from <http://www.aare.edu.au/99pap/luc99193.htm>
- Lucas, K. B. (2000). One teacher's agenda for a class visit to an interactive science center. *Science Education*, 84, 524-544.
- McClafferty, T. P., & Rennie, L. J. (1997, March). *A triangulation strategy to measure children's learning outcomes from an interactive exhibit*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Oakbrook, IL.
- McCrary, P. (2002, Autumn). Blurring the boundaries between science centres and schools [Electronic version]. *Ecsite Newsletter*, 52, 10-11.
- McManus, P. M. (1992). Topics in museums and science education. *Studies in Science Education*, 20, 157-182.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Michie, M. (1998). Factors influencing secondary science teachers to organise and conduct field trips. *Australian Science Teachers Journal*, 44(4), 43-50. Retrieved March 28, 2007, from Academic Search Premier database.
- Middlebrooks, S. (1999). Children's imaginative play in the urban environment. *Journal of Museum Education*, 24(2), 23-25.

- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Moussouri, T. (1997). *Family agendas and family learning in hands-on museums*. Unpublished doctoral dissertation, University of Leicester, United Kingdom.
- Moussouri, T. (2003). Negotiated agendas: Families in science and technology museums. *International Journal of Technology and Management*, 25, 477-489.
- Olson, J. K. (1999, March). *A qualitative analysis of the field trip experience: A formal trip in an informal setting*. Paper presented at the National Association for Research in Science Teaching Annual Conference, Boston, MA.
- Orion, N. (1993). A model for the development and implementation of field trips as an integral part of the science curriculum. *School Science and Mathematics*, 93, 325-331. Retrieved December 23, 2004, from Academic Search Premier database.
- Orion, N., & Hofstein, A. (1994). Factors that influence learning during a scientific field trip in a natural environment. *Journal of Research in Science Teaching*, 31, 1097-1119.
- Parkinson, D. D. (2001). Securing trustworthy data from an interview situation with young children: Six integrated interview strategies [Electronic version]. *Child Study Journal*, 31, 137-156. Retrieved March 28, 2007, from Academic Search Premier database.
- Petersen, E. A. (2002). *A practical guide to early childhood curriculum: Linking thematic, emergent, and skill-based planning to children's outcomes* (2nd ed.). Boston: Allyn and Bacon.
- Piscitelli, B., & Anderson, D. (2001). Young children's perspectives of museum settings and experiences [Electronic version]. *Museum Management and Curatorship*, 19, 269-282.
- Piscitelli, B., & Weier, K. (2002). Learning with, through, and about art: The role of social interactions. In S. Paris (Ed.), *Perspectives on Object-centered Learning in Museums* (pp. 121-151). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science [Electronic version]. *Journal of Counseling Psychology*, 52, 126-136.
- Price, S., & Hein, G. E. (1991). More than a field trip: Science programmes for elementary school groups at museums. *International Journal of Science Education*, 13, 505-519.
- Ramey-Gassert, L., Walberg, H. J., & Walberg, H. J. (1994). Reexamining connections: Museums as science learning environments. *Science Education*, 78, 345-363.

- Rand, J. (2001). The 227-mile museum, or a visitors' bill of rights. *Curator*, 44, 7-14.
- Rennie, L. J. (1994). Measuring affective outcomes from a visit to a science education centre [Electronic version]. *Research in Science Education*, 24, 261-269.
- Rennie, L. J., & Johnston, D. J. (2004). The nature of learning and its implications for research on learning from museums [Electronic version]. *Science Education*, 88(S1), S4-S16.
- Rennie, L. J., & McClafferty, T. (1995). Using visits to interactive science and technology centers, museums, aquaria, and zoos to promote learning in science. *Journal of Science Teacher Education*, 6, 175-185.
- Reynolds, S. S. (1984). How to unstuff a museum: A preschool teacher's guide. *Curator*, 27, 59-64.
- Robinson, C., & Kellett, M. (2004). Power. In S. Fraser, V. Lewis, S. Ding, M. Kellett, & C. Robinson (Eds.), *Doing research with children and young people* (pp. 82-96). London, England: Sage Publications.
- Schauble, L., Gleason, M., Lehrer, R., Bartlett, K., Petrosino, A., Allen, A., et al. (2002). Supporting science learning in museums. In G. Leinhardt, K. Crowley, & K. Knutson (Eds.), *Learning conversations in museums* (pp. 425-452). Mahwah, NJ: Lawrence Erlbaum Associates.
- Schwandt, T. A. (1998). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 221-259). Thousand Oaks, CA: Sage Publications.
- Smith, A., Duncan, J., & Marshall, K. (2005). Children's perspectives on their learning: Exploring methods [Electronic version]. *Early Child Development and Care*, 175, 473-487.
- Smith, P. K., Smees, R., & Pellegrini, A. D. (2004). Play fighting and real fighting: Using video playback methodology with young children [Electronic version]. *Aggressive Behavior*, 30, 164-173.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Toronto Zoo. (n.d.-a). *About the zoo*. Retrieved Jan. 20, 2007, from <http://www.torontozoo.com/AboutTheZoo/>.
- Toronto Zoo. (n.d.-b). *School programs*. Retrieved Jan. 20, 2007, from <http://www.torontozoo.com/Schools/>.

- Tuckey, C. (1992). Children's informal learning at an interactive science centre. *International Journal of Science Education*, 14, 273-278.
- Tunnicliffe, S. D. (1994). Why do teachers visit zoos with their pupils? *International Zoo News*, 41(5), 4-13.
- Tunnicliffe, S. D., Lucas, A. M., & Osborne, J. (1997). School visits to zoos and museums: A missed educational opportunity? *International Journal of Science Education*, 19, 1039-1056.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Watson, K., Aubusson, P., Steel, F., & Griffin, J. (2002). A culture of learning in the informal museum setting? *Journal of Australian Research in Early Childhood Education*, 9(1), 125-139.
- Wellington, J. (1990). Formal and informal learning in science: The role of the interactive science centres. *Physics Education*, 25, 247-252.
- Wolins, I. S., Jensen, N., & Ulzheimer, R. (1992). Children's memories of museum field trips: A qualitative study. *Journal of Museum Education*, 17(2), 17-27.
- Wright, E. L. (1980). Analysis of the effect of a museum experience on the biology achievement of sixth-graders. *Journal of Research in Science Teaching*, 17, 99-104.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

## Appendix A – Observation recording sheet

<b>Observation Protocol</b>	
Study: Understanding the impact of young children's agendas on their learning and experiences during a school field trip to a zoo	
Date/time of observation: _____	Length of observation: _____
Activity observed: _____	
<b>Observations</b>	<b>Researcher comments</b>

## Appendix B – Parent/Guardian questionnaire text

### Understanding the impact of young children's agendas on their learning and experiences during a school field trip to a zoo

#### Parent / Guardian Questionnaire

Thank you very much for taking the time to complete this questionnaire. This questionnaire asks questions about your child's past experiences with, and interests in, zoos and animals. The information you provide will help us better understand your child's perspectives, and ultimately will help teachers and zoo education staff better understand how to design and run educational field trip programs. Please complete this questionnaire without the input of your child - we value your child's thoughts, but he or she will be asked for his or her perspectives in an interview.

Your name: \_\_\_\_\_

Your child's name: \_\_\_\_\_

**1. Has your child ever visited any of these types of institutions? Please check (✓) as many as apply, and then indicate approximately how many times each as appropriate.**

- |   |                          |             |
|---|--------------------------|-------------|
| Toronto Zoo   | <input type="checkbox"/> | _____ times |
| Other zoo (location: _____)                           | <input type="checkbox"/> | _____ times |
| Aquarium  | <input type="checkbox"/> | _____ times |
| Animal or marine theme park                           | <input type="checkbox"/> | _____ times |
| Natural history museum                                | <input type="checkbox"/> | _____ times |
| Interpretive nature centre                            | <input type="checkbox"/> | _____ times |
| Farm or farm show                                     | <input type="checkbox"/> | _____ times |
| Science centre or science museum                      | <input type="checkbox"/> | _____ times |
| Other location with live animals<br>(location: _____) | <input type="checkbox"/> | _____ times |

**2. Please rate what you think your child's familiarity is with 'what a zoo is' on the following 5-point scale:**

Not at all familiar    1       2       3       4       5       Very familiar

\* If your child has previously visited a zoo, please continue with question 3. If not, please proceed to question 7.

Past zoo visit experiences

**3. Who has your child been with when she or he visited a zoo? Please check (✓) all that apply:**

- Parent(s) / guardian(s)
- Grandparent(s)
- Other extended family member(s)
- Friend(s)
- Teacher and school class (or pre-school, daycare group)
- Other (please specify): \_\_\_\_\_

**4. Please list any particular animals or exhibits that you think your child enjoys seeing at a zoo, or activities that you think your child enjoys doing at a zoo.**

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**5. Are there any aspects of a past zoo visit that your child has talked about with you since the visit? Please describe briefly.**

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**6. Which zoo (e.g. Toronto Zoo, High Park Zoo) were you referring to in answering questions 3-5?**

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Interests and non-visit experiences with zoos and animals

**7. Is there a type of animal that you think your child is particularly interested in, or knowledgeable about? Please describe briefly.**

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**8. Please list any pets that live in your home, or any other animals with which your child has regular contact.**

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**9. Can you think of any indirect (non-visiting) experiences your child has had with zoos or zoo animals (for example, reading particular story or non-fiction books about zoos, watching particular television shows about animals)? Please describe briefly.**

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**10. Please use the space below to describe any other information that you would like to share regarding your child's prior experiences with, and interests in, zoos or animals.**

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Thank you again for your time and participation in completing this questionnaire. Please return it to your child's classroom teacher.

## Appendix C – Interview questions

### Pre-visit Interview

- 1) What are some of your favourite activities at school?<sup>6</sup>
- 2) What are some things that you do really well?
- 3) a) Tomorrow [this week] your class is going on a field trip to the zoo. Here is a piece of paper and some markers. Could you please draw me a picture of what you are looking forward to doing at the zoo?  
b) Please tell me about your picture. [Probe: Is there anything else that you are looking forward to doing on your trip to the zoo?]
- 4) a) Have you ever been to a zoo?

If yes:

- b) Tell me about that. [Probe: How many times? Were you at the zoo here in Toronto?]
- c) What did you enjoy doing when you visited the zoo? Tell me about that. [Probe: What did you enjoy seeing?]
- d) Who do you enjoy going with to the zoo? Why?
- e) If you had to explain to another kid in your class what happens when you visit a zoo, what would you say?

If no:

- b) What do you think people do when they visit a zoo?
- 5) You showed in your picture that you're really looking forward to [insert individual action]. Is there anything else that you really hope you will do on your trip to the zoo with your class? [Probe: Is there anything that you hope that you will see? Is there anyone that you hope you will spend time with?]
- 6) How do you think you are going to feel when you arrive at the zoo tomorrow [later this week]?
- 7) a) Do you have a favourite animal? Why?  
b) What do you know about [insert favourite animal]?  
c) How did you learn about [insert favourite animal]?

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<sup>6</sup> The warm-up questions 1 and 2 were obtained from Chapman (2005)

## **Post-visit Interview**

### **Questions for all child participants:**

- 1) What did you enjoy most about your field trip to the zoo?
- 2) I have here the drawing you made about your trip to the zoo. Please tell me about it.
- 3) What do you remember about the trip you took to the zoo? [Probe: What do you remember doing at the zoo? What do you remember seeing at the zoo?]
- 4) Can you tell me something that you learned on your trip to the zoo?
- 5) When we talked before the trip to the zoo, you said that you wanted to [insert specific agenda described by the child in pre-visit interview- ex. see the polar bear, have fun, ride on the bus]. Did you do that on the trip? Tell me about that. [Probe: What did you think about that? How did you feel about that?]
- 6) Did anything surprise you about your trip to the zoo? Tell me about that. [Probe: Did anything interesting happen that you didn't know was going to happen? What did you think about that? How did you feel about that?]
- 7) Did you miss out on anything that you wanted to do or see on your trip to the zoo? [Probe: What did you think about that? How did you feel about that?]

### **Extended protocol for children who were video-recorded at the zoo:**

Do you remember that you were being recorded by a video camera while you were at the zoo? I brought some of that video to show you today. Have you ever seen a video of yourself before?

\*After/while playing each video episode (up to three episodes):

- 8) a) Can you tell me what is happening here?  
b) Can you tell me what were you thinking about when this was happening?  
c) Can you tell me how you were feeling when this was happening?

## Appendix D – Findings tables

**Table D1 Main pre-visit agenda elements of the children: pre-visit desires and hopes and affective elements**

Child	Major element(s) of pre-visit drawing	Desires and hopes expressed in pre-visit interviews					Other activities at the zoo	Affective elements expressed in pre-visit interviews  Will feel:
		Exhibit-based			Social Spend time with:			
		Specific animals	Interactive experiences with animals	Seeing animals in general	Peers	Parent/guardian		
Adam	A lion, a giraffe, a zebra, a squirrel, a cheetah, and an unidentified animal	Lion Giraffe Squirrel Zebra Cheetah		✓				Happy
Angela	Herself looking at a cheetah	Cheetah	Touch animals		✓	✓		Excited
Chris	A tiger	Tiger Lion			✓			Okay
Diane	No drawing	Penguin Polar, black, and grizzly bears Giraffe					Visit the waterpark	Happy
Erin	No drawing	Giraffe Tiger Lion		✓				Excited
Jennifer	Herself feeding birds	Monkeys	Feeding the birds and animals Petting animals		✓			Happy and excited Going to be fun
Jessica	A beluga whale	Beluga Tiger Lion	Feed grizzly bears				Make clay animals	Happy

Child	Major element(s) of pre-visit drawing	Desires and hopes expressed in pre-visit interviews					Other activities at the zoo	Affective elements expressed in pre-visit interviews  Will feel:
		Exhibit-based			Social Spend time with:			
		Specific animals	Interactive experiences with animals	Seeing animals in general	Peers	Parent/guardian		
Kate	Herself hugging her mother	Tigers	Baboons jumping on bus		✓	✓	Go on a bus ride with baboons jumping on bus	
Mark	Three monkeys	Monkeys			✓	✓		Happy
Mary	A tiger	Tiger Seals Bears		✓				Happy
Matthew	A gorilla	Gorilla Polar bear			✓			Will be fun
Natalie	A giraffe and a baby tiger	Giraffe Tiger			✓		Eat sandwiches	Happy
Neil	A tiger	Tiger Lion Cheetah						Really good
Rebecca	A giraffe	Giraffe Alligator		✓		✓ * also listed the teacher, zoo educator, and researcher		Excited
Ruth	No drawing	Tiger Monkeys					Eat lunch	
Sean	A lion and three birds	Lion	Birds in pavilions		✓		Go on zoo rides	

**Table D2 Agendas the subgroup children were deemed to show during the visit**

Child	Exhibit-based elements Main types of expressions/actions:	Social elements		
		Peers Main interaction types:	Zoo educator Main interaction types:	Parents/guardians Main interaction types:
Chris	Engaging with exhibits Stops at or moves to other exhibits away from the tour group	Sociable walking, talking, or games Shares exhibits	Appears to listen	
Jennifer	Engaging with exhibits	Shares exhibits (less than others)	Appears to listen Answers questions Asks questions Makes comments	
Jessica	Engaging with exhibits Moves away from the tour group	Shares exhibits	Appears to listen Makes comments	
Mark	Engaging with exhibits Stops at or moves to other exhibits away from the tour group	Shares exhibits	Appears to listen Asks questions	
Mary	Engaging with exhibits	Sociable walking, talking, or games Shares exhibits	Appears to listen Makes comments	Interactions with her mother
Matthew	Engaging with exhibits Stops at or moves to other exhibits away from the tour group	Sociable walking, talking, or games Shares exhibits	Appears to listen Asks questions Makes comments	
Natalie	Engaging with exhibits Stops at or moves to other exhibits away from the tour group	Sociable walking, talking, or games Shares exhibits	Appears to listen Asks questions Makes comments	
Sean	Engaging with exhibits Stops at or moves to other exhibits away from the tour group	Shares exhibits (less than others)	Appears to listen Answers questions Makes comments	

**Table D3 Examples of one specific animal desire or hope of each child for the field trip, and the factors that appeared to shape them**

Child	Animal desired or hoped to see	Factors					
		Prior visit experience at zoo or zoo-like venue	Prior indirect experience with animal	Never seen before	Interest in animal (favourite animal)	Prior knowledge or conceptions (verbally declared in pre-visit interview)	School-related
Adam	Lion	✓				Have fur around them (manes)	
Angela	Cheetah	✓	Read about in book		✓	<ul style="list-style-type: none"> <li>• Fastest animal in the world</li> <li>• In the cat family</li> <li>• Have stripes under their eyes</li> <li>• Cheetahs are pets and get food for the people who live near them in the world</li> <li>• Sensitive and dangerous</li> </ul>	Topic of school project
Chris	Tiger	✓	Read about in book		✓	<ul style="list-style-type: none"> <li>• Eats meat</li> <li>• Males doesn't stay with females</li> <li>• Mothers take care of cubs</li> </ul>	
Diane	Penguin		Seen on TV	✓	✓	<ul style="list-style-type: none"> <li>• Eat fish</li> <li>• Are fat</li> <li>• Swim and dive</li> </ul>	
Erin	Tiger	✓			✓	<ul style="list-style-type: none"> <li>• Have stripes</li> <li>• Eat meat</li> </ul>	
Jennifer	Monkey	✓				<ul style="list-style-type: none"> <li>• Are crazy</li> </ul>	
Jessica	Beluga	✓				<ul style="list-style-type: none"> <li>• Are white</li> <li>• Have veins in tail</li> </ul>	
Kate	Tiger	✓	Born in the 'year of the tiger'			<ul style="list-style-type: none"> <li>• Look really cute, especially babies</li> </ul>	
Mark	Monkey	✓			✓	<ul style="list-style-type: none"> <li>• They jump around</li> </ul>	
Mary	Tiger		Read about in book			<ul style="list-style-type: none"> <li>• Live in the forest</li> <li>• Mothers hunt and take care of babies for one or two years</li> </ul>	

Child	Animal desired or hoped to see	Factors					
		Prior visit experience at zoo or zoo-like venue	Prior indirect experience with animal	Never seen before	Interest in animal (favourite animal)	Prior knowledge or conceptions (verbally declared in pre-visit interview)	School-related
Matthew	Polar bear		Has a toy at home	✓		<ul style="list-style-type: none"> <li>• Big and white</li> <li>• Have special paws so they don't slip in the arctic</li> <li>• They change colour from yellow to white</li> <li>• Look friendly</li> </ul>	Read about in a school activity
Natalie	Giraffe		Read about in book			<ul style="list-style-type: none"> <li>• Have long necks</li> </ul>	
Neil	Tiger	✓			✓	<ul style="list-style-type: none"> <li>• Have orange and black stripes</li> <li>• Eat meat</li> <li>• Live out in the country</li> </ul>	
Rebecca	Giraffe		Seen on TV	✓		<ul style="list-style-type: none"> <li>• Are big and tall</li> </ul>	
Ruth	Tiger	✓	Born in the 'year of the tiger'		✓	<ul style="list-style-type: none"> <li>• Have stripes</li> <li>• Are orange and black</li> </ul>	
Sean	Lions	✓				<ul style="list-style-type: none"> <li>• Make a 'roar' sound</li> </ul>	