

Competing Agendas: Young Children's Museum Field Trips



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Abstract Visitors to museum settings have agendas that encompass a wide variety of missions. Agendas are known to directly influence visitor behavior and learning. Numerous agendas are at play during a visit to a museum. We suggest that in a museum-based learning experience, children's agendas are often overlooked, and are at times in competition with the accompanying adult's agendas. This paper describes and qualitatively analyzes three episodes of competing agendas that occurred on young children's field trips to museums in Brisbane, Australia. The aim is to elucidate the kinds of tensions over agendas that can arise in the experience of young museum-goers. Additionally, we hope to alert museum practitioners to the importance of considering children's agendas, with the aim of improving their museum experience. Suggestions are also made for ways in which educators can address children's agendas during museum visits in order to maximize learning outcomes.



Introduction

Visitors to museum settings have agendas that encompass a wide variety of missions.¹ Visitors may establish the duration of the visit, expectations for the visit, and specific goals and/or aspirations for what they hope to experience. These agendas are known to directly influence visitor behavior and learning.² Yet systematic investigations to measure the impact of visitor agendas on learning outcomes of museum experiences are rare.³ Furthermore, no studies have exclusively focused on investigating young children's agendas

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in museum settings in order to understand their dynamic and impact. Part of the reason for this may lie in the fact that young children come to museums as part of a family or organized school group. Thus, from one perspective, children's agendas might seem pre-planned or otherwise predetermined by the power of the social and organizational structures surrounding them. However, even within organized power structures, it is reasonable to think that young children have missions and agendas that may not be consistent with the missions and agendas of their organizing group. Since numerous agendas are at play during a visit to a museum, we suggest that children's agendas are often overlooked, and are at times in competition with the accompanying adults' agendas.⁴

This paper describes and qualitatively analyzes three episodes of competing agendas that occurred on young children's field trip visits to museums, and provides suggestions for ways in which educators can incorporate children's agendas on museum visits to maximize learning outcomes.

Background

The influence of visitors' agendas on learning should not be underestimated, yet, as stated earlier, systematic investigations to measure the impact of visitor agendas on learning outcomes from museum experiences are rare. However, there are a handful of studies that shed some light on the important role visitors' agendas play in determining learning outcomes from museum visits and are reviewed as follows as a context to this study of children's museum agendas.⁵

Balling, Falk, and Aronson examined 929 fourth grade children to determine learning and attitudes resulting from a visit to the National Zoo in Washington, D.C. (1980). The study was designed to investigate the role that pre-visit orientation programs play in influencing children's learning outcomes on a school-based field trip visit. Children in the study were provided with one of three different pre-visit orientation programs with a different emphasis: cognitive (primarily conceptual and factual materials), child-centered (materials describing the zoo itself, and the experience they would have), and observational (materials suggesting how and what to observe when watching animals).

The child-centered orientation program, administered to one group, was designed to set children's minds at ease about the visit by informing them about the practical aspects of their field trip visit, such as how they would get there, how they would enter the zoo, what they would be seeing, what they could buy from the gift shop, and what they would be having for lunch.⁶ Children in this group scored significantly higher than any other group on a post-test measure of learning. Balling, Falk, and Aronson claimed that the children who received the child-centered orientation not only performed better on cognitive tests pertaining to the zoological experience than the group that was provided cognitive facts and concepts as an orientation, but that they also scored significantly higher on observation skills than children who were given an observation orientation session.

Balling, Falk, and Aronson noted that the children who received the child-centered orientation seemed more relaxed and attentive and were able to focus on the intended experience once they were at the zoo, whereas children in the other orientation groups

appeared to grow restless during the lesson at the zoo. Because most of the children in the study had visited the National Zoo on at least one previous occasion, it was suggested that the restless behavior demonstrated by the children in the non-child-centered orientation groups may be attributed to their knowing from previous zoo experiences what they wanted to see and do, and their uncertainty as to whether or not on this visit they would be able to satisfy their own agendas. Such agendas may have included seeing a certain animal or being able to do a certain task like purchasing items from the gift shop. The findings from this study suggest that children do have personal agendas of what they want to see and do prior to their visits, and that there is potential for improving learning outcomes by addressing children's agendas prior to the visit.

Similarly, Moussouri (1997) examined the agendas of children and adults in family groups ($n = 87$) for their visits to hands-on museums, and determined that the agendas varied within each family group. For example, different family members held different expectations for their visit. Children 16 and under in each family group had their own personal agendas. The children's expectations centered on observing particular objects and exhibits they had liked on previous visits, or had heard about and wanted to see.

Falk, Moussouri, and Coulson (1998) investigated the effects of different visit agendas on adult visitors' learning at the National Museum of Natural History in Washington, D.C. Falk, Moussouri, and Coulson categorized visitors into six agenda groups based on a "visitor motivation" instrument: education, entertainment, social event, life cycle, place, and practical issues. Typically, a visitor would express not one, but several of these motivations for visiting a museum.⁷ At the conclusion of their visit to the Geology, Gems and Minerals Hall, participants were interviewed to measure personal construction of knowledge and understanding from their museum experiences. When visitor learning was compared with each of the six motivational categories, only education and entertainment emerged as significantly correlated with learning. Falk, Moussouri, and Coulson claimed that although motivations related to social event, life cycle, place, and practical issues were prevalent among visitors, there was no evidence that the presence or absence of these motivations influenced visitor learning. Interestingly, those visitors who held a high entertainment agenda, independent of a learning agenda, also were determined to have high quality learning outcomes from the experience. Falk, Moussouri, and Coulson explain this in part by the fact that individuals in this agenda category spent significantly more time in the gallery than did those visitors in other agenda groupings. The study confirmed that an individual's motivations (agenda) for visiting a museum significantly influence how, what, and how much they learned from their visit.

Lucas's study illustrated that teachers and museum educators' agendas for school visits may also impact children's learning outcomes (2000). Lucas examined one teacher's agenda for her class's visit to an interactive science center in Brisbane, Australia. The study highlights the interaction that took place between a small social cluster of Year Seven students, their classroom teacher, and two in-gallery, adult, volunteer explainers. The episode occurred at an interactive exhibit (a Harmonograph) that generated Lissajous figures.⁸ Lucas's qualitative analysis of interview data sets—comprising interviews with the classroom teacher, the explainers, and the students in addition to in-gallery discourse—revealed that the classroom teacher and the explainers had distinct agendas.

The explainers' prime objective, in both word and action, was to ensure that the students' interactions with the exhibit were procedurally "correct" and would result in good Lissajous figures. The teacher's agenda, on the other hand, was to ensure that students had opportunities to experiment, manipulate, and predict outcomes of the Harmonograph in response to manipulating the positions and distributions of lead weights on the exhibit platform. The teacher also wanted her students to make connections with real-world applications of the science demonstrated by the exhibit. The analysis of the discourse and interaction between the parties during the in-gallery episode was somewhat incongruous in nature: that is to say, the objectives of the teacher and the explainer were not one and the same. Lucas concludes that the mismatch of agendas impacted student learning. He suggests that greater awareness, recognition, and understanding of stakeholders' agendas and the situated nature of learning that occurs as individuals interact with exhibits and people in the museum context is an important area of investigation.

Finally, a study by Briseño (2005) examined the on-site and longitudinal role of personal agendas and social interactions in family groups visiting an aquarium setting. (See also Briseño, Anderson, and Anderson 2007.) The study employed a collective instrumental case study approach (Merriam 1998; Stake 1995). The intention was to interpret the visiting agendas of adult members of 13 family groups with young children. The key outcomes of the study revealed that adult family members' entry agendas formulated prior to the visit are not entirely fixed; rather, these agendas are dynamic and continuously negotiated among family members. However, in all case studies, some elements of the entry agenda remain fixed; these elements were a key influence on the learning outcomes of the visit for all members of the group. Additionally, adult family members' entry agendas can be understood as the result of a combination of their motivations for visiting, planned intentions, and anticipated strategies.

Although few studies have considered the influence visitors' agendas have on learning, there is sufficient evidence that suggests that agendas play a significant role in shaping learning outcomes of museum experiences and influencing the extent to which agendas of stakeholders (teachers, museum staff, and visitors) are fulfilled. Exploring further how these agendas compete with one another is a factor of considerable importance in the examination of the impact and programmatic structure of young children's museum experiences. This is particularly relevant for museum educators and teachers who strive to facilitate learning by providing children with high-quality museum visits.

The Study

This study was part of the QUT Museums Collaborative (QUTMC) project—a multi-year research study funded by the Australian Research Council, industry partners, and the Queensland University of Technology (QUT). The Collaborative (1999-2002) was multifaceted (Piscitelli and Anderson 2000) and had the broad mission of investigating the nature and character of children's learning emergent from their experiences in museum settings. The study reported here was one part of a larger investigation of young children's interactive and informal learning in museums.⁹

The study considered children aged 4 to 6 years, from four different schools (three Year One classes and one kindergarten) who were observed on their class field trip visits to different museum settings in the year-long multi-visit program. The participating schools were situated in predominantly working- and middle-class socio-economic environments, within relatively close proximity to the museums. The museums involved in the QUTMC study included a natural and social history museum (the Queensland Museum), an interactive science center (Queensland Science Centre), a social history/art museum (Global Arts Link), and an art gallery (Queensland Art Gallery).

Each visit was approximately two hours in duration and occurred in a regular pattern throughout the school term.¹⁰ Prior to each museum visit, the classroom teacher and a member of the research team guided classroom experiences to prepare children for the up-coming visit, and provided children with opportunities to interpret and discuss previous museum experiences. Visits to the museums comprised a variety of episodes, including orientation to the environment, structured tours (both in-gallery and behind-the-scenes), free-choice and exploration activities, opportunities for active engagement and empowerment both individually and as a group.

In the initial stages of our research, we were conscious not to overly fix our own personal research agendas, but rather we adopted an interpretive approach towards understanding children's museum field trips (Erickson 1986; Schwandt 2003). We had broad goals, primarily focusing on examining and understanding young children's museum experiences. Our data collection captured children's museum experiences by a variety of methods: researcher field notes; in-gallery video recordings of child and adult in-gallery interactions; unobtrusive naturalistic observations; and in-gallery audio recording of children's conversations.

Episodes of children's museum experiences were analyzed by the research team who collectively viewed the videos of the in-gallery interactions and made interpretations of children's experiences with the aid of field notes and observations. The team met to discuss and compare their analyses and developed a collective interpretation of the case data sets (Stake 1995; Strauss and Corbin 1988). The final interpretations of children's experiences on field trips to museums resulted in vignettes supported by verbatim transcripts of the voices of the participants.

The Tale of the Three Agendas

From our interpretation of the data sets that captured children's interactions with museum staff and parents and experiences of the exhibitions and programs in museum settings, we identified several instances of a tension between museum-based agendas and children's agendas.

In keeping with the sentiments of various visitor researchers, we have concluded that these competing agendas have power to directly influence children's behavior, learning and the overall museum experience.¹¹ Emergent from our case study data sets, we identify and discuss three kinds of competing agendas: 1) The Agenda of Content. 2) The Agenda of Mission. 3) The Agenda of Time.

The Agenda of Content: Ben and Melanie at the Queensland Art Gallery—Rose-Hill Kindergarten¹² is located in Ipswich, a small city approximately 32 miles from the state capital and the Queensland Art Gallery (QAG). Throughout the year, a group of four-year-olds had been visiting other museums, including the Global Arts Link (GAL), a regional social history and art museum, and the Queensland Museum. The visit to QAG occurred on the ninth and final visit of the class's multi-visit museum program. Since it was the class's first time at QAG, the museum experience commenced with a general walk-through orientation of the building, followed by a half-hour experience where children could explore and play on the outdoor sculptures. Following a short morning-tea break, children visited a temporary exhibition, *Play*, designed for children. The innovative exhibition combined hands-on interactive experiences with works of art from the Queensland Art Gallery's collection, as well as children's drawings of their personal conceptions of play (Piscitelli 2002). All children engaged freely in the 615-square-meter/6520-square-foot *Play* exhibition space for a one hour period.

Ben was a five-year-old boy and a member of the Rose-Hill Kindergarten.¹³ The following dialogue describes a one-on-one interaction with Ben and Melanie (an art educator on staff who was supporting the class). The interaction begins when Ben approaches Melanie to ask if he can show her his favorite art work: Tony Coleing's *Beware of Camels with Volcano Humps* (1990).

B: Do you want to see my favorite art work?

M: Alright, let's see your favorite art work.

Ben runs 120 feet across the gallery to the *Beware of Camels with Volcano Humps* painting. Melanie catches up. Ben lies on the floor looking at the painting.

M: Wooh! Ben you must really like this art work!

B: 'Cause I like volcanoes... and when I grow up I am going to be a vulcanologist!

M: And what do they do?

B: They study volcanoes and take pictures from helicopters when they are flying across the crater.

Sharon (another class member) interjects:

S: I think that man is going to fall into the lava (pointing at the picture).

B: (Inaudible.)

M: So, why is this your favorite artwork other than the fact that you want to be a vulcanologist?

B: Because I like when...things that make the lava flow is the chemicals deep inside the crater, right under the ground. And, the people in Hawaii have a special name for trying to keep the lava under the ground so the volcano doesn't pop up again. But once people say that volcanoes erupt once, they always say that disaster will always happen [again].

M: Now we came here because you said this was your favorite. Let's have a look at the painting.... Do you see the color of the lava?



Children examine *Beware of Camels with Volcano Humps* (1990), a painting by Tony Coleing. Photo by Katrina Weier.

B: Yeah... I have got a toy volcano at home. And it erupts when you put bi-carbonate of soda first and vinegar last, and then pooooof... it sprays and flows down the sides.

Melanie tries to reorient Ben's conversation by pointing at the picture. Ben ignores her gesture and proceeds to describe his toy volcano.

B: And, if you put it on a table, it foams up... it falls on your shoe. It stains into your shoe!

M: Does it?

B: It stains into the table too.

Mom: [Ben's mom interjects] Why do you like that painting?

B: 'Cause I like the colors and how the volcano.... You know when volcanoes erupt what [kind of] shower they have?

M: No.

B: A shower of stones.

M: Oohh!

B: A shower of stones like rain.

M: What are those little droplets over lava falling into?

B: They're falling into the lava.

M: How do you think the skateboarder got there [pointing to the picture]?

B: I think he came down from the sky.

M: Maybe he jumped down from different barrels? I wonder why he's got his fingers pointed up like that?

B: I think I do. I think he's trying to tell us that he is not going to die and he is going to survive.

M: Well! I can see why that is your favorite art work.

B: When I study volcanoes when I grow-up and be a vulcanologist, I'll be in the streets of Mexico City. I've got a video of volcanoes. And one night in Mexico City, they said that something really bad was going to happen to their town. And they said that when Popo exploded in 1996 they still said that they were living next door to a killer.

M: You know so much about volcanoes.

It is clear from the transcript that Ben's motivation and excitement about the work of art were fed by his personal fascination with volcanoes. This is in part reflected by the fact that he independently approached Melanie with a keen desire to show her a painting that he connected with in many ways, and that provided him with a deeply aesthetic experience (Housen 1992; Kindler 1998). Ben is clearly literate about the topic of volcanoes, as demonstrated by his ability to recite facts as well as relay personal stories about them. Consequently, Ben's agenda is to tell someone everything he knows about volcanoes. Ben's actions are in keeping with characteristics of young children as learners: egocentric and knowledgeable communicators (Berk 2002).

As a gallery educator, Melanie's job is to use art vocabulary and art terms in the context of children's conversations, and to raise awareness of the artistic and aesthetic qualities of the collection. Consequently, she interjected arts-rich, discipline-specific language and attempted to extend the conversation toward the qualities of the artwork, but to little avail. Ben seemed keen to demonstrate his deep understanding of all things volcanic, and largely ignored the language and ideas added by the adult guide.

The competing agenda here is one of content. Ben wanted the content of the conversation to focus on his experiences with volcanoes. Melanie wanted the content of the conversation to focus on the painting. Throughout the interaction, Melanie attempted to keep to her agenda by trying to draw Ben's attention to various features of the painting. Ben made attempts to follow Melanie's agenda. However, he quickly returned to his main agenda, which was to divulge information and to express his personal excitement about volcanoes. It could be argued that Melanie's agenda in desiring to help Ben appreciate the artistic aspect of the paintings was one that had already, in part, been realized by Ben before he asked her to come and look at his favorite painting. Alternatively, Ben may have needed to express his keen understanding as a prerequisite to meaningful engagement with Melanie's agendas. In a sense there was a tension between agendas: Ben's agenda to express his personal connectiveness to the painting, and Melanie's agenda to increase his appreciation of art.

The Agenda of Mission: Chris and Ron at the Queensland Museum — Henley-Grove State School is located in inner city Brisbane, approximately two miles from the Queensland Museum (QM). Throughout the year, children had been visiting the Queensland Science Centre and Queensland Art Gallery on three occasions apiece. The visit to QM occurred on the seventh visit of the class's multi-visit museum program. Since it was the class's first time to QM, the experience commenced with a general walk-through orientation of both the outside and inside of the building, followed by a 45-minute "sneak-peek" tour. This was a semi-structured tour that was intended to introduce children to the museum's many natural environment and cultural heritage displays. The tour was led by one of QM's more experienced education officers. There were eight children in the group.

Chris (C) was a six-year-old boy and a member of the Henley-Grove class. The following dialogue and action script focuses primarily on the interactions of Chris and the education officer, Ron (R), who was facilitating a guided tour through the museum.

The episode begins with Ron leading the children through a diorama of a blacksmith's workshop in the *Getting About* exhibition, and continues through the Endangered Species and Dragons and Diprotodons exhibition areas.

Blacksmith Workshop—Ron gathered the children at the display and began to tell them about it. The children were lined up along the corrugated iron barrier, listening well to Ron and looking closely at the display. The children began to ask questions, as Ron led them away and onto the next area of the tour. Ron stopped at the base of the escalator and gathered the children as a group to remind them about safety issues.

Chris asked: "Are we going to see the dinosaurs?" Chris's question went unanswered. Chris left the group at the top of the escalator and went straight ahead (not wanting to listen) and was called back by Ron. The group moved upstairs and Ron gathered them outside of the Endangered Species exhibition. Ron told the children they only had a short time in which to have a look at this exhibition.

Endangered Species—Ron gathered the children at the Paradise Parrot display. He sat the children down and talked to them briefly about the display. Ron told the children to have a last look at the displays before moving out to continue the tour. Chris approached Ron.

C: Is this Wombat real? Is that Wombat real? Is that Wombat real?

R: Yes [meaning to say it is a stuffed Wombat].

C: Why doesn't it come out? Why doesn't it come out?

R: It can't come out cause it's not alive!

Outside Endangered Species, on the way to Inquiry Centre, Ron led the children to the stuffed koala on the pole.

R: Here's one you can touch.

C: Did you kill it?

A: [Andrew, a classmate] Is it stuffed? Are these stuffed? Are these all stuffed [pointing to kangaroo display opposite]? Are the eagles stuffed [in glass cabinet further along]?

Andrew's interest led the group to gather at the eagle display, and Ron talked briefly about the eagles. Children tended to move toward the Inquiry Centre. Ron drew them back, saying they had to go up to the next level. Ron led the children on to the escalator.

C: Are we going to see the dinosaurs?

Br: [Brenda, a classmate] No, we're going to see the exhibition.

R: Of what? What exhibition do you think we're going to?

Dragons and Diprotodons — Ron stopped the group at the Thylacaleo. They viewed the animal exhibit for a brief time.

C: Is that real?

Ron explained to the children that this exhibition is not about dinosaurs, but is about other animals that lived at the time after the dinosaurs. Chris ran off down the gallery.

R: Chris! This way, mate! [calling Chris back to the group]

C: Hey! Here is another dinosaur! [pointing to a prehistoric lizard display he found]

R: Chris! This way, mate! [again calling him back to the group]

C: There was another dinosaur down there!!!

Ron encouraged the children to move into the exhibition, by having a look at the Euryzygoma. Chris took off in the opposite direction, to look over the edge of the balcony, yelling out:

C: Hey, there's a dinosaur! Here's another dinosaur!

Despite Ron's earlier statements about the fact that the exhibits in *Dragons and Diprotodons* gallery were not about dinosaurs, the large-scale exhibits strongly satisfied Chris's conceptions and desire to see dinosaurs at the Queensland Museum. Ron called to Chris to rejoin the group and have a look at Euryzygoma. Ron encouraged all the children in the group to stand on the bench and have a look at the exhibit.

C: Hey, look at that.

The children moved into the exhibition, stopping with interest at the animated robotic *Megalania* display. Ron joined them and began a discussion and was interrupted by a child called Meg (M).

M: I know the name of the lizard [interrupting Ron].

R: What is it?

M: Komodo Dragon.

R: No.

M: Mmm? Giant snake?

Ron told the children the correct name, *Megalania*, and began to explain about it.

C: Is it real?

J: [classmate] He's moving.

R: He's not real, but he's moving like a real one.

C: What's that noise?



Under the thorny feet of T-Rex at the conclusion of a sneak-peek tour in the museum's dinosaur garden. *Photo by Michele Everett.*

Ron led the children to the *Diprotodon* skeleton and began talking about it, briefly. Many children dispersed to follow their own interests. Ron moved among the children, making comments and answering questions. Ron gathered the children together near the end of the exhibition, at the barrier, to look over to the opposite wall and the floor below. Ron drew the children's attention to the dinosaur footprints in the display on the wall. All of the children were very interested in the display. Ron moved the children on to view the Whales display, chatting to Chris about dinosaurs on the way. Children then had morning tea in the museum dinosaur garden.

From the very beginning of the sneak-peek tour, Chris's agenda was to find and see displays about dinosaurs. Chris's agenda persisted throughout the entire tour, as demonstrated by his seeking behaviors: going out ahead of the main group, and persistent questioning throughout the tour as to whether or not they would see dinosaurs. Chris appeared to have a second agenda pertaining to the desire to understand whether or not various animal-based artifacts were real. This agenda was common among the children we observed in the study. The question as to what is real, fabricated, stuffed, alive or formerly alive are persistent issues that arise in children's minds in natural history museum settings. For Chris, his agenda to resolve such questions was in part frustrated by the responses Ron provided during the discourse concerning the stuffed wombat and the robotic *Megalania*. The behavior demonstrated by Chris was in keeping with characteristics of young children as learners: to ask questions and to follow their personal interests (Piscitelli, Everett, and Weier 2003).

Ron's agenda was to provide the children with a brief preview of the many Queensland Museum galleries the children would be exploring more fully on subsequent visits. The rationale for this agenda is based soundly in theories of pre-orientation, the benefits of which are demonstrated in numerous studies of museum visitor behavior (Anderson 1994; Anderson and Lucas 1997; Falk and Balling 1982; Kubota and Olstad 1991; Orion and Hofstein 1994). In short, orientation to the setting reduces the high levels of perceived novelty that children commonly experience in new settings such as museums. High levels of perceived novelty are detrimental to on-task learning and behavior. Thus the agenda of the sneak-peek tour served to orient children, as well as to reduce their high levels of novelty to more moderate and optimal levels for learning. Because Ron is extremely knowledgeable about the museum's collections, his agenda also included telling students interesting facts and stories about objects in the exhibits.

The competing agenda here was one of mission. Chris's mission to find dinosaurs was in competition with Ron's mission to provide the children with information about the museum's exhibitions. Chris attempted to satisfy his agenda by repeatedly asking Ron if they were going to see dinosaurs, even running away from the group at times to look for them. However, during the episode, Ron adopted a teacher-centered approach to the tour: he was focused on communicating the facts of the exhibitions. He did not divert from his planned course of action to accommodate Chris's needs.

The Agenda of Time: Irene and Shelly at the Queensland Sciencecentre— St. Mark's School is located in suburban Brisbane approximately six miles from the Queensland Sciencecentre (QSC). Throughout the year, children had been visiting the Queensland Museum and

Queensland Art Gallery three times apiece. The visit to QSC occurred on the eighth visit of the class's multi-visit museum program. On this field trip, children attended a traditional Science Centre theatrical show titled "Unexpected Science." The show featured scientific experiments and discussions exploring such aspects of science as the Bernoulli Effect. Following the live theatrical show, children engaged in a 45-minute free-choice exploration in the Forces gallery. The children were to interact with exhibits to explore the different ways things move. These interactions were facilitated in groups that consisted of four children, Science Centre volunteer explainers, and one other adult chaperone.

Irene (I) was a six-year-old girl at St. Mark's School. The following dialogue and action script focuses primarily on the interactions of Irene and one of the researchers, Shelly (S) who was observing and helping facilitate the group's experiences in the Forces gallery.

The session begins at 10:35 a.m. Shelly reads the directions about the electric motor exhibit aloud to Irene. Irene gives it a go.

S: Switch this on.

Irene makes the motor work by applying magnets to the external housing of the coil.

S: It's electric movement. You've made an electric motor.

I: Hey look! I've made an electric motor.

S: How is that working?

I: You have to get it if it's like that, you turn it to run, that has to be on, and you put one on and it starts spinning, and when you put the other one on, it goes more faster.

Bella (B), another researcher, joins the conversation

B: Okay go. What's happening?

I: That's how you go faster.

B: Why does it go faster?

I: Because the magnets are on it.

B: So the magnets make it [spin]?

I: Yep.

B: What happens when you take them off?

The motor stops. Irene restarts the motor by applying the magnets once again. At 10:40 Irene is still at the electric motor.

S: Which direction is it spinning? What happens when you turn that the other way?

Irene experiments with it. At 10:45 a.m. Shelly informs Irene that it is time for morning tea. Irene continues to interact with the exhibits as though she doesn't want to miss out on anything.

I: What do you do on here? Excuse me. What do you do on here?

S: You're making a magnet.

Shelly reads the directions to Irene. Irene follows directions and experiments with metal rods. Irene counts.

S: Now see if it's a magnet yet. See if it attracts those metal nuts. [It does.]

Irene repeats the process with the second rod.

S: Now let's see. Is it a magnet?

I: Un-uh. [No]

S: Do you know why? It says because the coil here (points to the sign)—

I: Yeah.

S: —is arranged in such a way, all these little things that make up inside the coil are scattered so it doesn't make a magnet, but when the things inside this coil are all lined up like this (points to sign) it does make a magnet.

Shelly reminds Irene that it is time for morning tea. Irene continues to ask how different exhibits work.

I: What do you do on here? What is it doing?

S: These are compasses. Because there's a magnetic field in there—

I: Yeah.

S: In here. See this?

I: Yeah.

S: The compasses work on a magnetic field and so the magnetic field is affecting all the compasses.

I: Ok. Now I get it. [She moves to another magnet exhibit]. Now what happens here?

S: Do you know magnets have two different sides? Gently press down on the top one and see what happens to the middle ones. Now let the disc go and watch what happens. See if you can figure out why these magnets are not coming together.

I: Because they're not on the right side.

S: Exactly. So if we could take this [the top] off, then what could we do?

I: They'll stay together.

Irene moves to another exhibit. Shelly explains what to do. Shelly turns the switch to send electricity through the coil and see what the compasses do. Irene gives it a go.

S: Now turn the switch so the electricity flows in the opposite direction. What happens?

I: It goes the other way.

Irene moves to another exhibit.

- I: This one looks interesting. What do you do here?
- S: You push the magnet in and out of the coil and watch the current meter. [S reads the sign to I]. Does the current flow if the magnet is not moving? [I tries it out.] So now, you're moving the magnet through the coil and you're producing electricity. But when it's still, there's no electricity.
- I: That was interesting.
- S: Okay Irene, let's go to morning tea. We're late, we're late for a very important date.

The session ends at 10:50 a.m.

Irene's agenda was consistent with the goals established for the session: to interact and explore exhibits and to identify how movement is caused. Irene also had learning on her agenda. She not only asked questions, but she listened to the explanations the adults provided as a way to increase her understanding of scientific phenomena. The behavior demonstrated by Irene was in keeping with characteristics of young children as learners to explore, ask questions, and to engage in sensory explorations (Piscitelli, Everett, and Weier 2003).

It is evident from the transcript that Shelly was an adept and skilled facilitator of children's free-choice experiences in the Sciencentre environment. Shelly's agenda was to facilitate a set of experiences with Irene that would result in high quality learning outcomes. Shelly was facilitating these experiences within the overriding agenda of a limited time period that was allocated to the class's visit to the Forces gallery.

The competing agenda here was one of time. The facilitator had to keep to a schedule and the child wanted more time to explore. Irene's agenda for exploration of the exhibits was in competition with the time limits set for this session. During the last five minutes of the episode, Shelly made repeated attempts to get Irene to stop interacting with the exhibits. Irene demonstrated her reluctance to change her agenda to fit with the next stage of the visit. Even after she was told that it was time for morning tea, she continued the same pattern of interacting with exhibits and asking questions related to how exhibits worked.

Discussion

In the preceding sections, we identified, interpreted, and described three episodes of competing agendas—content, mission, and time—as part of our interpretive studies of children's behavior in various museum settings. Each episode will be discussed with the intention of providing adult guides with suggestions for incorporating children's agendas in museum visits in order to maximize opportunities for learning.

1. The agenda of content—The agenda of content focuses on who is in charge of the conversation during a museum encounter: the child visitor or the adult guide. In an ideal situation, the conversational flow would be equal, with both parties able to achieve equilibrium and exchange of ideas, resulting in a collective experience that integrates different but equally valid agendas. But this was not the case with Ben and Melanie's conversation.

Though the episode was not overtly frustrating to either party, there were moments when there was a mismatch in the discourse—where neither seemed to be connecting with the other's ideas—as if there were a flurry of facts entering the conversational space, but not a lot of linkages between the speakers.

From a developmental perspective, Ben was expressing his views about art at the most basic level: discussing the subject matter and his extensive knowledge about the story implied in the work (Parsons 1987). Melanie, as the guide and art expert accompanying this young visitor, attempted to add new ideas to the conversation, utilizing a child-centered approach. Using constructivist strategies—such as providing the visitor with choice and control, following up personal interests and tapping into prior knowledge—Melanie worked hard to achieve a meeting of the minds with Ben. But the end result was not the satisfying and smooth conversation educators hope for in a museum learning episode.

Various authors point to a range of interactive strategies used to connect visitors with the content of the museum and its collections. Such strategies could be used effectively to narrow the gap between audience and expert in museums. Suggestions by Weier (2000), Falk and Dierking (2000), Piscitelli, Weier, and Everett (2003), and Piscitelli, Everett, and Weier (2003) provide examples of conversational strategies to build better linkages between novice visitors and expert guides in the museum environment. The potential of the objects and experiences offered at museums depends upon the adults who guide and support young children's visits. A range of behaviors—non directive, scaffolding, and directive behaviors—may be used. At the non-directive end of the continuum, behaviors such as physical proximity, making casual comments, encouraging children, and modeling learning can be employed. At the scaffolding level, adults should focus attention, suggest, explain, hypothesize questions and pose problems to challenge children and extend their thinking. More directive behaviors—such as demonstrating, instructing, and analyzing—can be useful as well. (See Piscitelli, Weier, and Everett 2003, 37-42 for specific details.)

2. The agenda of mission—The agenda of mission focuses on who is in charge of the path that is to be followed during a museum experience. Both Ron's and Chris's agendas and missions were clearly defined from the outset of the museum visit. Ron's mission was grounded in sound museum pedagogical practice: to orient children to the museum as a way of reducing high levels of perceived novelty in order to optimize institutionally intended learning experiences. However, Ron adopted an adult-centered approach to accomplish his mission. For the most part, he controlled the conversation as well as the path the group followed on the tour. Chris's mission was also clear from the outset: to find and see dinosaur exhibits. Balling, Falk, and Aronson (1980) found that children on museum tours wonder whether or not they will see a certain animal or be able to do a certain task. A preoccupation with dinosaurs was the dominant agenda in Chris's mind, and his single-minded interest was in conflict with Ron's orientation agenda.

One option for dealing with competing agendas of this nature might be to establish a short dialogue between the experienced facilitator and the children at the beginning of the visit, or alternatively between classroom teacher and children at school prior to the visit. The dialogue might embody the principle of negotiated curriculum, in which educators

and children negotiate what they want to see, do, and learn about (Boomer, Lester, Onore, and Cook 1992; Heidrich, Baker, and Nailon 1999). In this way, children's interests can be incorporated into the plan for the visit. Once children's curiosity is satisfied, they may be more likely to concentrate on other aspects of the museum experience. When mutually negotiated agendas are pursued, the experiences will have a higher probability of achieving intended goals and may ultimately be more rewarding for the participants. Another way to deal with the competing agendas of mission would be to adopt an emergent curriculum strategy—to have a plan that is flexible and spontaneous, and that can be modified to accommodate children's interests (Jones and Nimmo 1994). Incorporating these sorts of child-centered practices that address children's needs would require simple adjustments to the planned program and may result in increased learning outcomes.

3. The agenda of time—The agenda of time is common to school-based museum visits. At the beginning, when there was no pressing time issue, Shelly adopted a child-centered approach. She allowed Irene to follow her interests, and to spend as much time as she wanted at each exhibit. Shelly guided Irene's learning by using questioning strategies that encouraged opportunities for experimentation and higher levels of thinking. Irene and Shelly's agendas matched because they both had the agenda of learning—Irene to learn and Shelly to assist learning. Clearly, Irene was deeply engaged and highly motivated by the experiences she was having in the gallery.

However, Irene and Shelly's agendas were at odds when the time allocation issue emerged at the latter stages of the experience. Shelly's agenda to get Irene to morning tea on time was entirely appropriate. There are limits to the time that class groups can spend in museums and galleries. The question is: how can we harness, exploit, and capitalize on the clear enthusiasm demonstrated by children like Irene? The answer to this question is multi-faceted. First, St. Mark's School was participating in a multi-visit program to the Sciencecentre. The fact that children would be returning to the museum on a later visit provided opportunities for educators to sensitively design subsequent museum experiences to capitalize on the experiences of previous visits. The benefits children receive from repeat visits to museums are widely reported in the literature (Balling, Falk, and Aronson 1980; Hein 1998; Piscitelli, McArdle, and Weier 1999; Wolins, Jensen, and Ulzheimer 1992). Second, Irene's highly motivating experiences provide clues for teachers to link experiences back in the classroom with children's museum experiences. Finally, in some instances it may be appropriate to throw out the lesson plan in favor of agendas that may be more profitable for children. If children are highly engaged and learning, and in consideration of all other constraints, maybe there should be provisions in the visit schedule that allow children to continue with what they are profiting from.

Conclusion

In considering the competing agendas in children's field trips to museums, several key themes emerge that are pertinent to both teachers and museum educators. First and foremost, children have agendas for museum visits. Sometimes these agendas are well

established prior to the visit. Others emerge during the course of the museum experiences. These agendas have the potential to profoundly affect children's museum experience and the learning that emerges from the visit. The agendas of Ben, Chris, and Irene may have given the children a richer, more empowering museum experience. One key criterion for connecting with children's agendas is through open communication. Where appropriate, adults may negotiate the museum curriculum. A parallel issue is the need for teachers and museum staff to listen sensitively to the voices of children. Controlling the museum experience is in many ways easier than negotiating the experience. However, as these observations show, a sensitively determined, negotiated path could result in far higher quality and more rewarding learning outcomes for children. We regard this as a readily achievable change to the way museum staff and teachers design and implement museum field trip experiences for children.

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Notes

1. In this paper, we use the term "museum" to include facilities such as history museums, art museums, and science centers.
2. The QUT Museums Collaborative definition of "learning" encompasses several dimensions, including socio-cultural, cognitive, aesthetic, motivational, and collaborative. A complete definition is described in detail in Piscitelli and Anderson (2000). See also Balling, Falk, and Aronson (1980); Briseño (2005); Briseño, Anderson, and Anderson (2007); Doering (2002); Falk and Dierking (2000; 1992); Lucas (2000); MacDonald (1993); Moussouri (1997).
3. See Balling, Falk, and Aronson (1980); Briseño, Anderson, and Anderson (2007); Falk, Moussouri, and Coulson (1998); Moussouri (1997).
4. In the context of field trip visits to museums, adults may include the child's teacher(s), chaperones, caregivers, and the museum staff who facilitate programming.
5. See Balling, Falk, and Aronson (1980); Briseño (2005); Briseño, Anderson, and Anderson (2007); Falk, Moussouri, and Coulson (1998); Lucas (2000); Moussouri (1997).
6. "Child-centered" is characterized by program design intended to promote a child's personal qualities rather than to provide training or information.

7. "Place is that cluster of reasons given by individuals when they categorize museums as leisure/recreational/cultural destinations emblematic of a locale or region. *Education* represents a category of reasons related to the aesthetic, informational or cultural content of the museum. Many people view museum visiting as being a part of their *life cycle*. Museum-going was seen as a repeated activity which takes place at certain phases in one's life (e.g., 'I was brought to the museum as a child and now I'm bringing my child to the museum'). A related, but separate category was *social event*; museum-going as a 'day out' for the whole family, a special social experience with a friend or relative, a chance for individuals to enjoy themselves separately and together. Finally, the *practical* side of a museum visit also factors into people's motivations for visiting. External factors such as weather, proximity to the museum, time availability, crowd conditions and the entrance fee contribute to many visitors' decision-making process" (Falk, Moussouri, and Coulson 1998, 106).
8. Two oscillations — one along the x -axis and the other along the y -axis — when added, result in a two-dimensional motion. The path is known as a Lissajous figure.
9. See Piscitelli (2002); Anderson, Piscitelli, Weier, Everett, and Tayler (2002); Piscitelli and Anderson (2001); Piscitelli, Weier, and Everett (2003); Piscitelli, Everett, and Weier (2003).
10. In Queensland, a school term comprises approximately 10 weeks. The nine visits of the multi-visit program were distributed over terms two, three and four of the school year — three visits per term over the 2001 school year.
11. See Balling, Falk, and Aronson (1980); Briseño (2005); Briseño, Anderson, and Anderson (2007); Falk and Dierking (1992; 2000); Lucas (2000); MacDonald (1993); Moussouri (1997).
12. Pseudonyms are used for schools and kindergarten.
13. Pseudonyms are used for all children and museum personnel.

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