

ABSTRACT

Title of dissertation: REFRAMING PARENT INVOLVEMENT: THE ROLE OF A MUSEUM PROGRAM IN CONNECTING PARENTS AND SCHOOLS

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Using grounded theory methods, a qualitative study was conducted to generate theoretical propositions about the nature of parent involvement generally, and the role that a museum program can play in facilitating parent involvement more specifically. In-depth retrospective interviews were conducted via telephone with 20 parents who had participated in the museum program. Data were analyzed using the constant comparative method and drawing from the Ecologies of Parent Engagement framework (Calabrese Barton et al., 2004). At the core of the analysis is the phenomenon of parent engagement – as opposed to involvement – that emphasizes the social and cultural negotiations through which parent involvement occurred, and the more informal, personal manifestations of involvement through the museum program. At a more micro level, analysis revealed the mechanisms through which the museum program facilitated engagement, namely building capital and authoring. Findings culminate with an adapted version of the Ecologies of Parent Engagement model, revised to reflect the role of a museum program in facilitating parent engagement. Overall, study results have implications for theoretical understandings of parent involvement, providing a more holistic picture of why and how parents are involved, and what forms their involvement takes. Establishing hypotheses about parent involvement processes makes it possible for

educators to reconsider practical strategies for bringing parents and schools together in support of children's development, and in particular to broaden their thinking about the spaces in which parent involvement occurs.

REFRAMING PARENT INVOLVEMENT:
THE ROLE OF A MUSEUM PROGRAM IN CONNECTING
PARENTS AND SCHOOLS

By

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Chapter One: Introduction and Study Overview

Rationale for the Study

Parent involvement in school has long been a topic of interest for policy-makers, researchers, and practitioners concerned with facilitating optimal development for elementary school-aged children.¹ Whether it is defined as home-based activities (e.g., helping with homework), school-based activities (e.g., volunteering in the classroom or attending school functions), or parent-teacher communication (e.g., talking with the teacher about a child's performance), parent involvement in school has been linked to higher grades and test scores for children (Hara & Burke, 1998; Miedel & Reynolds, 1999; Shaver & Walls, 1998), fewer instances of learning problems (Miedel & Reynolds, 1999), increased attendance and classroom participation (Christenson & Sheridan, 2001), and more positive attitudes towards school (Henderson & Mapp, 2002).

Much of the research in this area focuses on clarifying the links between parent involvement and children's achievement, seeking answers to questions such as: How much involvement is required to make a difference in children's academic success?; and What kinds of involvement best predict children's academic success, and why? (Christenson & Sheridan, 2001; Cox, 2005; Fishel & Ramirez, 2005; Henderson & Mapp, 2002). Although this research has made a strong case about the benefits of parent involvement, it makes assumptions about the underlying processes – assumptions about why parents are involved, and the strategies they use to build and maintain connections

¹ For the purposes of this study, “parents” are defined broadly to include any significant adult in a child's life who contributes to their education, including siblings, grandparents, aunts, uncles and even foster parents.

with school staff. More research needs to focus on the mechanisms through which parents become and remain involved in their children's schooling (Bouffard, 2008). With a better understanding of these practices, future research can continue to examine the benefits of parent involvement in a more nuanced fashion.

Over the last decade, a growing body of work has focused on effective strategies for forming and sustaining connections between parents and school staff in support of children's schooling (Henderson & Mapp, 2002). While emerging research sheds much-needed light on the processes of parent involvement, it is weakened by two critical gaps. First, processes are typically defined and measured in overly narrow ways, usually only from the perspective of school staff (Calabrese Barton, Drake, Perez, St. Louis & George, 2004; Jordan, Orozco & Averett, 2001). The reasons why parents get involved (or do not get involved) are typically reduced to overly simplistic person-level variables – such as self-efficacy and role construction (Green, Walker, Hoover-Dempsey & Sandler, 2007; Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins & Closson, 2005) – while the strategies parents use to connect with their child's school are narrowly measured in terms of the frequency of specific behaviors – such as volunteering in the classroom or helping with homework (Henderson & Mapp, 2002). Not only do these variables and measures typically explain very little of the association between parent involvement and children's achievement (Henderson & Mapp, 2002), but they miss a great deal of what is important about the process of parent involvement itself, especially for the large number of parents living in low-income, urban communities. Such variables tend to ignore the broader, more contextual aspects of parents' involvement decisions and strategies, including the daily life routines of these parents, their identity as

parents, their relationships with their children and with other parents, and their interactions with school staff.

The second gap in emerging research on parent-school connections is methodological in nature. Most studies are descriptive, focusing on parents' naturally occurring involvement practices. While this work offers valuable insight into how and why parents choose to involve in their children's schooling, it says nothing about which strategies or practices are most effective, under what circumstances, and why. It says nothing about specific actions or steps that could be taken by educators to create optimal conditions for parental participation. Studies are needed that focus on specific intervention programs designed to implement various strategies for involving parents in their child's schooling.

Parent involvement scholar Diane Hiatt-Michael, when asked recently to articulate the most critical topic for future research in her field, made the following call to action:

“...study the effects of connecting community agencies with the school on family involvement issues and student educational outcomes. Public education is fragmented and agencies are separated into silos. Educators and researchers must jump across these silos to connect their services to school sites. Despite the current paucity of research on this subject, promising family-community research sites exist in almost every locality. Research data could reveal the factors and activities that lead to a program's desired outcome” (Bouffard, 2008, p. 37).

This study focuses on museum programs as a particular context for family-community research. Museums have long partnered with schools to support the building of thriving learning communities for children. A key component of the learning infrastructure in a

community (Luke, Camp, Dierking & Coles, 2001),² organizations such as museums, libraries, and youth centers are increasingly being recognized as important players on the parent involvement stage (Bouffard & Weiss, 2008; Hiatt-Michael, 2006).

Museum programs, this study hypothesizes, are an important context for understanding parent involvement processes. Such programs operate not within a single setting (i.e., school), but rather across multiple settings (i.e., school, home, community), thus broadening the concept of parent involvement to include a variety of places in which it occurs. In addition, museums are not tied to instructional and curriculum mandates in the same way that schools are, making them freer to experiment with various approaches and strategies for parental participation. Finally, museums focus not just on students, but on learners across the lifespan, and more broadly on groups of learners (e.g., families with parents and children learning together). In this way, museums that take seriously the notion of enhancing parent involvement can draw upon experience and expertise in facilitating parent-child connections, a crucial aspect of parent involvement.

Although museum programs have much potential for facilitating parent involvement, their role in connecting parents and schools has not been studied. As Hiatt-Michael notes, the time has come for researchers to take seriously the contribution that community agencies and programs can make in bridging the gap between home and school, and use these programs as research sites for investigating the factors and activities that promote parent involvement in children's schooling.

² The notion of a learning infrastructure has been put forth by various researchers (St. John & Perry, 1996; Falk & Dierking, 2000) to highlight that individuals learn from various educational institutions and venues, not just school. The learning infrastructure is made up of schools, homes, non-school educational institutions (e.g., libraries and museums), community-based organizations (youth groups and scouts), and media (e.g., books, newspapers, magazines, television, film, radio, and the internet).

Purpose of the Study

The goal of this study is to generate theoretical propositions about the nature of parent involvement, and specifically the mechanisms through which a museum program can facilitate parent involvement. Grounded in a sociocultural model of parent involvement, the study used qualitative methods within a grounded theory approach to better understand the processes through which a museum program can connect parents and schools in support of children's learning. The results of the study add to current theoretical understandings of parent involvement in schooling, providing a more complete picture of the processes through which parents become and remain involved. Establishing hypotheses about parent involvement processes makes it possible for educators to reconsider practical strategies for bringing parents and schools together in support of children's development, and in particular to broaden their thinking about the spaces in which parent involvement occurs.

Conceptual Framework for the Study

There are limited theoretical frameworks that describe the ways in which parents and schools connect in support of children's learning. Numerous developmental theories have focused on parent-child relationships – Baumrind's (1966) parenting styles and Darling and Steinberg's (1993) parenting relationships model are two among many – and many of these theories have been adapted to the school context in order to focus on student-teacher relationships (i.e., Pellerin, 2005), but there are few conceptual frameworks that describe parent-school relationships.

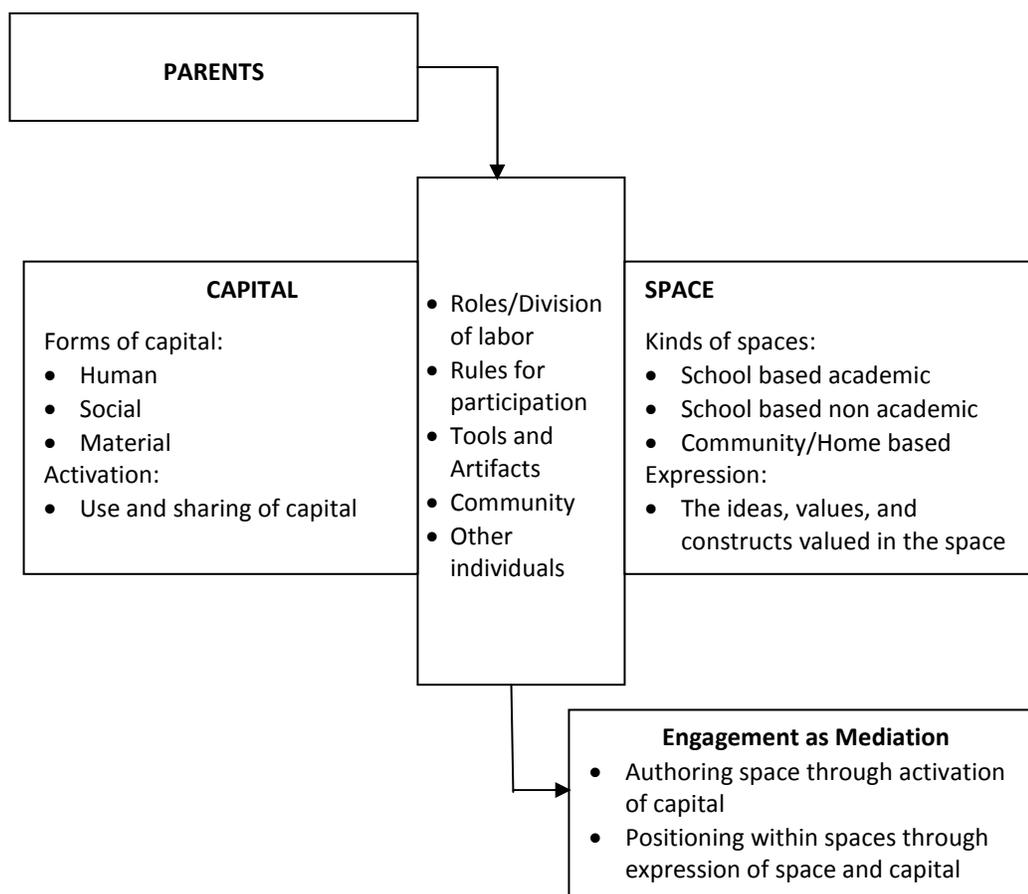
Relevant models include Epstein's typology of parent involvement (1987; 1995), Chrispeels' typology of parent involvement (1992; 1996), Grolnick and Slowiaczek's

resource model (1994), Hoover-Dempsey et al.'s psychological model (1997; 2005), and Calabrese Barton et al.'s sociocultural model (2004). Not only do the majority of these models focus on middle-class, Caucasian parents, but they also tend to emphasize teacher and school-initiated behaviors rather than parent-initiated behaviors (Jordan et al., 2001). This study is a direct response to calls for new models of parent involvement that emphasize the agendas of parents in low-income, urban communities and that take into account the role of a community organization or program in facilitating parent involvement (Hiatt-Michael, 2006; Jordan et al., 2001). In so doing, the study sought not to create a theoretical framework from scratch, but rather to work from an existing theoretical framework in order to generate conceptual conjectures explaining the role of a museum program in facilitating parent involvement. Specifically, the study is grounded in Calabrese Barton et al.'s (2004) sociocultural framework of parent involvement – one that views involvement as a dynamic, distributed process that exists within the relationships parents form with other school-based agents – and uses this framework as a starting point for articulating the mechanisms through which a museum program facilitated parents' involvement in their child's schooling.

The Ecologies of Parent Engagement (EPE) model, developed by Calabrese Barton and her colleagues in 2004 and depicted below in Figure 1.1, emphasizes not *what* parents do to engage with their children's school – as is typically stressed in other parent involvement models (i.e., Epstein, 1987; 1995) – but rather *how* and *why* parents are involved, and the complex *ways* in which their involvement occurs. Drawing upon cultural-historical activity theory, the EPE framework examines parents in relation to their environment and emphasizes the importance of parents' social context. It expands

traditional definitions of parent involvement to include not just parents' actions and behaviors at school (i.e., Epstein's typology), but also their beliefs and orientations towards those actions: "Parental engagement...is more than just an object or an outcome. Engagement is a set of relationships and actions that cut across individuals, circumstances, and events that are produced and bounded by the context in which that engagement takes place" (Calabrese Barton et al., 2004, p. 6). The EPE model posits a definitional shift from parent *involvement*, typically defined in terms of individual actions and behaviors desired by school staff, to parent *engagement*, defined in terms of parents' social and contextual relationships relative to others in their child's schooling.

Figure 1.1. Ecologies of Parent Engagement (Calabrese Barton et al., 2004)



Calabrese Barton and her colleagues argue that parent engagement is the mediation of space and capital in relation to others in the school setting. Space is defined by drawing upon various notions of sociocultural environments in order to denote an area described by both theoretical and physical boundaries (Holland, Lachicotte, Skinner & Cain, 1998; Lave, 1993; Lave & Wenger, 1991). More concretely, spaces (e.g., the teaching of science, the management of student behavior, parent networks at school) are created by individuals who come together for particular reasons as well as the roles they play; spaces are shaped by the rules and expectations for participating together in that space, the tools typically enacted for that shared participation, and the mediating artifacts produced by that participation. Capital is defined by drawing upon Bourdieu's (1977) definition – the human, social, and material resources one has access to and can activate for their own desired purposes.

Calabrese Barton and colleagues use these notions of space and capital to propose two key actions that foster parent engagement – authoring and positioning. “Actions that engage [parents] are both about how parents activate the resources available to them in a given space in order to author a place of their own in schools, and about how they use or express that place to position themselves differently so that they can influence life in schools” (Calabrese Barton et al., 2004, p. 8). Put simply, authoring is the process whereby parents create a place within their children's school and their education by activating their various forms of capital. For instance, a parent might spend time in their child's classroom, using human and social capital (time, one-one-one interactions with the teacher) to forge a personal space in which she gains information relative to what her child is learning. Positioning involves the expression of both space and capital to gain

positions of power, influence or control within relationships and spaces relative to children's school and their education. For instance, a parent might take note of the kind of homework and projects her child brings home, and use these assignments to ask questions of the teacher and make suggestions about her child's learning or about the curriculum or other aspects of the school situation that would potentially improve children's learning.

Parents both author and position themselves, and are authored and positioned by others, in relation to their children's school. For Calabrese Barton et al., the goal of parent engagement is to create multiple and varied opportunities for parents to author and position themselves, finding comfortable and productive ways to be involved in their children's schooling.

The EPE framework offers a particular lens through which to view parent involvement. It situates involvement within the larger social and cultural context around parents' participation, thus framing involvement more broadly than just school-centered activities. It focuses on parent involvement in low-income, urban elementary schools, acknowledging that the realities of these parents' lives often dictate different forms of involvement than those engaged in by middle-class, Caucasian parents. And it takes into account the "what," "how," and "why" of involvement, thus offering a holistic model for understanding parent involvement processes.

In clarifying the conceptual framework for this study, it is also useful to define key terminology. Throughout this dissertation, the term parent involvement denotes any educational activities in which parents engage with the express goal of aiding their children in their schooling. Research clearly shows that parent involvement activities

have different effects on children's achievement (for instance, school-based activities as compared to home-based activities); however, the focus in this dissertation is not on children's achievement, but rather on the reasons parents become engaged and the resulting strategies they use to engage with their children's education. As such, the definition is purposely broad. The EPE framework distinguishes between parent involvement, a term that describes what parents do, and parent engagement, a term intended to expand current understandings of involvement "to also include parents' orientations to the world and how those orientations frame the things they do" (Calabrese Barton et al., 2004, p. 4). The term parent engagement is used in this way throughout this dissertation.

The term schooling is used to describe the phenomenon in which parents are involved. The term is intended to denote more than just an educational institution (i.e., school); schooling encompasses the educational process broadly framed (i.e., the various ways in which a child's school education intersects with their learning outside of school as well) including its cultural/enculturation components which privilege certain types of sense-making and interactions.

Research Questions

Through qualitative inquiry, this study sought to generate theoretical propositions describing the processes through which parents participating in a museum program connected to their children's schooling. Unlike in quantitative studies, qualitative research questions are open-ended, evolving, and non-directional (Creswell, 1998). In keeping with these criteria, the overarching question for the study was as follows: *How does a museum program provide opportunities for parents in a low-income, urban*

community to engage in their child's schooling? Sub-questions under this primary research question guided the development of theoretical propositions; they were as follows:

- How are parents engaged in their children's schooling as a result of participation in the museum program?
- What were the conditions that facilitated parents' engagement through the program?
- What were the obstacles that hindered parents' engagement through the program?
- How well does the EPE framework, and specifically the constructs of authoring and positioning, describe the mechanisms through which the museum program facilitated parent engagement?

Organization of the Study

This dissertation study is organized into five chapters. This first chapter provided an introduction to the proposed study. It outlined the study's rationale, its purpose, and its theoretical orientation. Overall, the chapter established the goal of generating conceptual hypotheses to describe the nature of parent involvement generally, and the role that a museum program can play in facilitating parent involvement more specifically.

Chapter Two is a review of the literature. This chapter draws from relevant research and theory encompassing parent involvement processes. It starts with a brief overview of research on the impact of parent involvement on children's academic achievement, arguing that the inherent problems within this body of research stem from faulty assumptions made about why and how parents connect with their child's schooling. The chapter then turns to a detailed review of empirical studies focused on

why and how low-income, urban parents participate in their children's schooling. An understanding of the various factors that encourage and inhibit parent involvement leads to hypotheses about the role that museum programs might play in helping parents to overcome involvement obstacles; relevant research on this topic is then reviewed. Finally, the chapter summarizes the strengths and weaknesses of relevant theoretical models for explaining home-school connections, including those developed by Epstein (1987; 1995), Chrispeels (1992; 1996), Grolnick and Slowiaczek (1994), Hoover-Dempsey et al. (1997; 2005), and Calabrese Barton et al. (2004). A case is made for using Calabrese Barton et al.'s model, called the Ecologies of Parent Engagement (EPE), as the basis for this study.

Chapter Three highlights the research design and methods. Grounded theory methodology is used in order to generate theoretical propositions about the nature of parent involvement, and the role that the museum program played in facilitating parent involvement. Within this approach, "theory evolves during the actual research, and it does this through continuous interplay between analysis and data collection" (Strauss & Corbin, 1994, p. 273). This constant comparative method, as it is known, permits the researcher to develop theoretical categories from the data in an evolving and iterative fashion.

After examining a rationale for using grounded theory, Chapter Three continues with a description of the research context. This study was conducted within the context of a parent involvement program designed by The Franklin Institute Science Museum, Philadelphia, PA. Called *Parent Partners in School Science (PPSS)*, this 5-year, National Science Foundation-funded initiative targeted parents and children in Kindergarten

through 4th grade at three urban elementary schools in Philadelphia. The program started in September 2001 and ended in June 2006.

Next, Chapter Three describes the study itself. In-depth, retrospective interviews were conducted via telephone with 20 parents who had participated in the museum program. Follow-up interviews conducted with 3 of these parents served as member checks in order to verify the overall theoretical propositions. Parent interview data were analyzed in a step-wise, iterative fashion according to the constant comparative method (Charmaz, 2000; Glaser & Strauss, 1967; Strauss & Corbin, 1990). An external researcher provided critical review at three points during the coding process, again for the purposes of verification.

Chapter Four presents the study's findings according to a two-part story. At a macro level, analysis reveals evidence to support the definitional shift from parent involvement to parent engagement. Through the museum program, parents engaged in their children's schooling in ways that were different from their existing forms of involvement, ways that were more informal, relaxed, and personal in nature. In addition, parents engaged in ways that were highly social and contextual, involving the activation of specific forms of capital as mediated by the values and constraints of a particular context. Whereas other frameworks in the literature often separate the "why" and "how" of involvement from the "what" of involvement, this study provides evidence to suggest that definitions of parent engagement should consider all of these elements in concert.

At a micro level, findings identify the mechanisms through which the museum program facilitated parent engagement. More specifically, the data fit with two of the three constructs from the Ecologies of Parent Engagement model, namely building capital

and authoring. The museum program helped parents to build multiple forms of capital; parents then activated that capital within a specific context in order to find new places to engage in their children's schooling. In keeping with the definitional emphasis on engagement rather than involvement, the places parents authored were more personal in nature than their existing forms of involvement. Whereas most parents were already attending school functions or involved in the PTA or volunteering in their child's classroom, the museum program helped them to feel more connected to the fabric of their children's school, to feel more comfortable or even empowered in the school, and to find ways to monitor or check what was going on in their child's classroom. In addition, the museum program provided parents with opportunities to reframe their parent identity in ways that more closely aligned them with their children's schooling, for instance helping them to see themselves as someone who could help their child with science. The chapter culminates with an adapted version of the Ecologies of Parent Engagement model, developed through these findings.

Chapter Five provides the conclusions for this study. It highlights the need for reframing parent involvement, supporting a shift from individual parents' psychology to instead focusing on the individual in context, as is the emphasis in parent *engagement*. Such a shift makes visible not only the social and cultural negotiations through which parent involvement occurs, but also the more informal, personal manifestations of involvement amongst low-income, urban parents. More specifically, Chapter Five points to the contributions this study makes in refining and clarifying constructs within The Ecologies of Parent Engagement framework.

In addition to reviewing the theoretical contributions made by the study, Chapter Five also stresses the important role that museums can play within the parent involvement arena. Findings from this study show not only that a museum program can in fact further parents' involvement in their children's schooling, but more importantly reveal the complex ways in which this involvement occurs, and what it means to parents over time. This chapter concludes with a discussion of the practical implications of this study, pointing to strategies such as helping parents to build social capital relative to their child's school, and creating parent involvement programs that target parents and children together.

Chapter Two: Relevant Research and Theory

Introduction

Bridging the gap between home and school is a fundamental aim of educational efforts in this country. Critical to accomplishing this objective is parent involvement in elementary children's schooling. Decades of research show that parents have a major influence on children's achievement (Cox, 2005; Christenson & Sheridan, 2001; Fishel & Ramirez, 2005; Henderson & Mapp, 2002). When schools and parents work together to support learning, children tend to do better in school, stay in school longer, and like school more. However, there remain unanswered questions about why and how parents get involved in their child's schooling to begin with, especially amongst parents in low-income, urban communities.

In this chapter, previous research on parent involvement in schooling is used to frame the proposed investigation of the role that a museum can play in facilitating connections between parents and schools. The chapter has four sections. It begins with a brief overview of empirical research linking parent involvement in schooling to children's achievement; the case is made for shifting this research focus to one that centers on increased understandings of why and how parents are involved in their child's schooling to begin with. Second is a review of what is known about strategies for connecting parents and schools, with a focus on low-income, urban families; central to this review is an emphasis on parents' agendas for involvement in contrast with the agendas of school staff. Third is a discussion of the role that a community program can play in facilitating connections between parents and schools; the unique and understudied role of a museum program within the parent involvement arena is highlighted. Finally,

the chapter concludes with an examination of existing theoretical frameworks that seek to describe and predict the ways in which parents are involved in their child's schooling; it is argued that alternative models are needed to frame parent involvement from parents' point of view and to acknowledge the social and cultural context surrounding their involvement.

Impact of Parent Involvement on Children's Achievement

Since the 1980s, much theoretical and empirical attention has been paid to the impact of parent involvement on children's achievement. Two lines of research have emerged; one that focuses on the effects of parents' naturally occurring involvement (i.e., participation in parent-teacher conferences, open houses), and another that examines the effects of interventions designed to promote parents' involvement in their child's schooling (i.e., those connected with Head Start).

Typically, it is accepted within the literature that parents' naturally occurring involvement has some positive effects on children's achievement, depending on the type of involvement (Henderson & Mapp, 2002; Pomerantz et al., 2007). For instance, Miedel & Reynolds (1999), in a study of 704 K – 8th graders in urban Chicago, measured parents' attendance at school meetings, attendance at school assemblies, participation in school trips, volunteering in the classroom, attendance at parent/teacher conferences, and transportation of children to and from school. They found that both volunteering in the classroom and attendance at school assemblies were positively associated with students' reading achievement; however the other forms of involvement seemingly made no difference. Izzo, Weissberg, Kasprow and Fendrich (1999) looked at both school- and home-based parenting activities. In a study of 1,205 K – 3rd grade urban students, these

authors rated the frequency of parent-teacher contact, quality of parent-teacher interactions, parents' participation in educational activities at home, and their participation in school activities. They found that parents' participation in educational activities at home predicted students' academic achievement more strongly than involvement in school-based activities.

Other studies have shown that the benefits of parent involvement for children extend beyond just academic achievement to include improved behavior at home and at school, and better social skills and adaptation to school (Henderson & Mapp, 2002). Stepping back, the research on parents' naturally occurring involvement in school reveal a key trend; while there are some positive effects on children's achievement, and in particular with children from low-income, urban communities, the effects are inconsistent and largely dependent upon the form that parent involvement takes.

The effects of parent involvement intervention programs are much less clear, but generally suggest little to no impact on children's achievement (White, Taylor & Moss, 1992; Mattingly, Prislun, McKenzie, Rodriguez & Kayzar, 2002). For instance, White et al. (1992) conducted a meta-analysis of the effects of programs intended to promote parent involvement in the context of early intervention programs, such as Head Start. Most studies focused on parents' home-based involvement (i.e., teaching children developmental skills). They found no difference in effect size between those programs with parent involvement and those programs without. Ten years later, Mattingly et al. (2002) confirmed this finding in their meta-analysis of 41 studies of parent involvement intervention programs.

Clearly there are many questions that still need to be answered within the literature linking parent involvement in schooling and children's achievement. Under what circumstances does parent involvement positively influence children's achievement? How much involvement is required? Does more involvement make more of a difference? What types of parent involvement are most beneficial for children's academic success? Pomerantz et al. (2007) argue that in order to answer these questions about the benefits of parents' involvement in children's academic lives, the focus of parent involvement research needs to shift from an emphasis on the *extent* of parent involvement to an emphasis on the *how* of parent involvement. After reviewing relevant literature (unfortunately the authors do not clarify how many studies they reviewed or the criteria by which they selected these studies), they claim that the field needs to pay more attention to *why* and *how* parents are involved in their children's schooling, since there is reason to believe that the processes of parent involvement contribute to its effectiveness for children.

A focus on how parents are involved in their child's schooling sheds much-needed light on processes that parents use to build and maintain connections with schools. Increased attention is being paid to this line of inquiry in an effort to truly understand how parents are involved, and what strategies are most meaningful and realistic for them. This review now turns to a discussion of research on such strategies.

Strategies for Connecting Parents and Schools

The last decade has witnessed a growing number of empirical studies focused on strategies for connecting parents and schools in support of children's achievement. In their well-known review of research on parent involvement conducted in 1994,

Henderson and Berla reported no such studies on this topic. Eight years later, when Henderson and Mapp (2002) updated this review, they reported 16 studies that focused on parent involvement strategies. This increase is due to multiple factors. One, as discussed earlier, the mixed results within studies linking parent involvement to children's achievement has caused many researchers to look at the underlying issues and processes within involvement for explanations. Two, at a more practical level, researchers are appreciating that there is little point in studying the impact of parent involvement on children if we do not understand how to bring parents and schools together in support of children's learning to begin with.

Currently, there are limitations within the literature on parent involvement strategies. For the most part, strategies are defined in terms of concrete, school-centered behaviors, such as helping with homework or volunteering in the classroom. A meaningful understanding of how parents and schools can come together to support children's learning would include not just concrete behaviors, but also process-based issues such as why and how parents choose to become involved, and ways in which they do so that go beyond school-centered behaviors. In addition, most of the research on parent involvement strategies has focused on middle-class, Caucasian parents (i.e., Hoover-Dempsey et al., 2005). Given that the current study examined involvement amongst parents in low-income, urban neighborhoods, the need arises to look specifically at strategy-based studies within that population, something that has not been done to date. Outside of the empirical literature on parent involvement and student achievement, very little attention has been paid to these parents, and yet there is good reason to believe that

their decisions and strategies for involvement likely differ from those of more affluent parents.

What follows is a review of three key topic areas within the broader arena of parent involvement strategies, specifically related to low-income, urban parents: 1) why parents get involved with their child's schooling; 2) factors that influence their involvement decisions; and 3) ways in which involvement strategies need to be redefined and reframed.

Why Parents Choose to Become Involved in their Child's Schooling

Two reviews have summarized what is known about why parents participate in their children's schooling. In 1997, Hoover-Dempsey and Sandler reviewed psychological literature in order to develop a theoretical model explaining parents' involvement decisions and choices. In 2005, they revised their initial model based on a decade of research (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins & Closson, 2005). Their revised model suggests that parents' involvement decisions are based on three psychological constructs: 1) motivational beliefs, including parents' role construction for involvement (or their beliefs about what they are supposed to do relative to their children's schooling), and their sense of efficacy for helping the child learn; 2) perception of invitations to involvement from the school, teacher, and child; and 3) elements of parents' life context that permit or encourage involvement.

While these reviews provide a comprehensive framework for understanding parents' motivations for engaging in their children's schooling, they do little to explain involvement processes within diverse family contexts. Hoover-Dempsey et al. review

studies focusing predominantly on middle-class, Caucasian parents who are predisposed to become involved in their child's schooling and whose social networks are likely to support such involvement. They include a brief discussion of life-context variables that may influence parents' involvement decisions – parental resources and family culture – but they do not delve into the research on marginalized families in order to fully understand the nature of their involvement decisions and patterns. To what extent are all parents provided equal access to participation? What challenges do low-income, urban parents face in getting involved in their children's schooling? Are these parents less involved than their wealthier counterparts? What strategies do they use to get involved and what does their involvement look like? How is their involvement supported by their social network? Questions such as these have not been comprehensively addressed within these reviews.

With that in mind, the next section reviews findings from empirical studies looking at why low-income, urban parents connect with their child's schooling. Specifically, three primary motivations are highlighted, including parent identity, beliefs, and perceptions of invitations for involvement.

Identity. For many low-income, urban parents, aspects of their identity – in particular their family background or culture – serve as a primary motivator for their involvement in their children's schooling. The concept of family identity is based in the work of Holland, Lachicotte Jr., Cain & Skinner (1998). Holland et al. focus not just on cultural identities that form in relation to major structural features of society (i.e., ethnicity, race, gender) but also on activities or practices that are outcomes of living in, through, and around the cultural forms practiced in social life (i.e., personal agency or

sense of self within the world). In most studies, family identity is viewed as an obstacle to involvement; for instance, belonging to a cultural group that has relatively little familiarity with what goes on in schools or had language barriers that hindered interactions with school staff. However, in some cases, it also serves to encourage involvement in children's schooling.

Many low-income, urban parents note that the ways in which their parents were involved – or not involved – influenced their own participation patterns. For instance, DeMoss and Vaughn (2000) found that many parents were reportedly inspired to raise their children differently than their parents had raised them, participating in their education in ways their parents had not. Other parents in this same study wanted to emulate their parents, who had been quite involved in their schooling in ways they felt had made a difference to them. Similarly, Mapp (2003) interviewed 18 low-income parents and found rich descriptions of how their own parents' level of participation in their schooling was a major influence on why and how they were involved in their children's educational development.

In addition, low-income, urban parents participate in their children's schooling out of a desire to shape the cultural values and practices of their children. For example, Lopez (2001) conducted case studies with 5 Mexican American immigrant families. His results suggest that parents are involved out of a desire to pass on to their children important "life-lessons" about the value of hard work, lessons that were an integral part of their family history.

Beliefs. Research confirms that low-income, urban parents have high educational aspirations for their children, and that these expectations drive their desire to be involved

in their children's schooling (Coll et al., 2002; Griffith, 1998; Lopez, 2001; Lopez, Sanchez & Hamilton, 2000; Miretzky, 2004; Overstreet et al., 2005; Smrekar & Cohen-Vogel, 2001). For instance, Griffith (1998) examined the effects of various individual- and school-level variables on involvement amongst low-income, cultural minority parents in 122 public elementary schools. He found that parents who had higher educational expectations for their children – measured in terms of the amount of schooling they wanted their children to complete – reported higher participation in school activities than did parents who had lower educational expectations for their children. Similarly, in a study of 159 low-income, African American parents, Overstreet et al. (2005) found that how far parents wanted their child to go in school was a significant predictor of their involvement in children's schooling.

Within studies focused on immigrant samples, parents highly value the importance of a good education for their child, recognizing that this was a large part of why they had emigrated to the United States. For instance, Smrekar and Cohen-Vogel (2001) explored low-income, minority parents' ideas and attitudes about schooling through in-depth interviews with 10 African American and Hispanic parents. Results showed that for these parents, the primary outcome of schooling was a good job or professional career for their child. Many said they had come to this country for the express reason that they wanted their children to have more opportunities and a better education than they would have received in their country of origin. For them, becoming involved in their children's schooling was a way to help them achieve these goals. In a related vein, Coll et al. (2002) investigated immigrant group and individual differences within groups in parental reports of involvement amongst Portuguese, Cambodian, and

Dominican parents. They found that all three immigrant groups had high aspirations for their children to become “respectable and productive members of society” (p. 318); they saw involvement as a means to this end.

In addition to being motivated by educational aspirations for their child, low-income, urban parents are also driven to get involved by a larger sense that they have an important role to play within their child’s schooling (Chrispeels & Rivero, 2001; Drummond & Stipek, 2004; Jackson & Remillard, 2005; Mapp, 2003; Miretzky, 2004). For instance, Jackson and Remillard (2005) examined how low-income, African American mothers conceptualized their roles in their children’s mathematics learning. In interviews, mothers explained that they saw themselves as advocates for their children’s education. They thought strategically about their children’s futures, and found various ways to help their children succeed in math – despite limitations in their own understanding of the subject matter – because they felt it was their responsibility to provide such assistance. Through interviews with 18 low-income, cultural minority parents, Mapp (2003) found that not only did parents understand that their involvement facilitated their children’s development, but they were motivated to continue their involvement once they saw their children acting more positively towards school as a result of their participation.

Research also suggests that as part of parents’ role within their children’s schooling, they believe it is important to monitor their children’s progress (Abrams & Gibbs, 2002; Diamond & Gomez, 2004; Jackson & Remillard, 2005). For instance, Diamond and Gomez (2004) studied the involvement of working-class and middle-class African American parents. They found that working-class African American parents had

a strong reform orientation, questioning and critiquing school personnel to make sure that their children were receiving quality education in what was seen as a low-quality school system. Abrams and Gibbs (2002) conducted in-depth interviews with 10 parents from diverse cultural and income groups, and found that both African American and Latina mothers sought to monitor the type of schooling being delivered to their community's children. Griffith (1998) found that lack of information about what was going on in schools motivated parents to become involved, upsetting them to the point where they decided to participate in their child's schooling in order to know what was happening.

Invitations. Outreach from schools and teachers motivates low-income, urban parents to get involved in their children's schooling (Griffith, 1998; Patrikakou & Weissberg, 2000; Drummond & Stipek, 2004). For instance, Patrikakou and Weissberg (2000) investigated associations between parents' perceptions of various teacher outreach practices and their self-reported involvement, both at home and at school. Even after they controlled for various socio-demographic variables – parents' education and employment, as well as child's grade, gender, and race – they found that the strongest predictor of parent involvement was parents' perceptions of teacher outreach. Specifically, parents who perceived teachers as extending a helpful hand, and encouraging parents to visit the school, were more likely to participate in a variety of school activities, including visiting the child's classroom and attending parent-teacher conferences. Similarly, Drummond and Stipek (2004) found that when teachers gave suggestions to parents about how to help their children in reading homework, parents rated the importance of being involved in children's reading homework much higher.

Griffith (1998) found that school climate can also motivate low-income, urban parents to participate in their children's schooling. Specifically, he found that when school staff provided opportunities for parent involvement – by arranging activities and informing parents of ways to become involved – and created an atmosphere in which parents felt welcomed, parents were more likely to get involved.

Overall, low-income, urban parents get involved for many of the same reasons that motivate middle class, Caucasian parents, including personal beliefs, invitations from schools, teachers, and students, and specific life circumstances (Hoover-Dempsey et al., 2005). At the same time, research suggests specific motivational issues that drive low-income, urban parents to participate in their children's schooling. In particular, immigrant parents were seemingly motivated by strong feelings of what was best for their children, perceiving that helping them to succeed in school would in turn help them to have a better life than they themselves have had. Hoover-Dempsey et al. (2005) found that middle-class, Caucasian parents are also driven by desires to see their children succeed. However, the studies reviewed by Hoover-Dempsey et al. merely convey the importance of educational achievement; the studies reviewed here suggest that immigrant parents in particular are driven by more than that – they want their children to succeed academically in order to overcome the marginalization they themselves have been subjected to in this country.

In addition, research suggests that low-income, urban parents get involved in their children's schooling out of a desire to shape and/or extend their parental identity. For instance, some parents wanted to break the pattern of lack of involvement on the part of their parents; others wanted to communicate specific family values of involvement to

their children. While Hoover-Dempsey et al. (2005) propose that parents are motivated by role construction, this finding seems markedly different, going beyond parental roles to emphasize more personal notions of parental identity.

While empirical studies using surveys and interviews provide insight into what motivates low-income, urban parents to become involved in their children's schooling, they say little about what sustains parents' involvement. In studying adult volunteerism, Penner (2002) focuses on two key aspects of why adults volunteer – factors that instigate their initial volunteer efforts and factors that encourage continued volunteer efforts. A similar approach within the literature on parent involvement would broaden current perspectives on the involvement process, acknowledging the two fundamental parts of the process (i.e., instigation and continued participation).

Although parents may be motivated to become and remain involved in their child's schooling, they are often restricted in their access to necessary invitations and resources. Research on strategies for connecting home and school focuses heavily on factors that influence the ways in which parents are involved. These factors are discussed next in order to emphasize the importance of the context surrounding parents' involvement decisions.

Factors that Influence Parent Involvement in Schooling

Low-income, urban parents have significant structural barriers to overcome in order to meaningfully participate in their child's schooling. Until recently, research on parent involvement has tended to focus on a generalized notion of low socioeconomic status (SES), usually a lack of parental education, as the primary barrier. However, results on the effects of SES are mixed, with some studies reporting significant

differences in involvement practices among SES groups (Griffith, 1998) and other studies suggesting that SES as measured by parental education is not necessarily related to the ways in which parents are involved in their children's schooling (Grolnick et al., 1997; Shaver & Walls, 1998). There may be a restriction of range in the education component of SES in some of these studies. In any case, several researchers, especially those focused on low-income, urban parents, have advocated for a reframing of this issue, arguing that SES is a proxy for a more complex set of factors relating to resources and capital (Calabrese Barton et al., 2004; Hoover-Dempsey et al., 2005). These researchers argue that educational beliefs, orientations, and actions do not emerge from parents' social class or racial group; rather they are informed by the environment in which parents live, and in particular by the resources they can access and convert into capital in support of children's schooling.

The notion of family capital (Bourdieu, 1986; Coleman, 1988; Wong, 1998) – comprised of human capital (knowledge, skills, and expertise), economic capital (income or wealth), social capital (availability of networks and relations of trust), and cultural capital (awareness of cultural norms and values) – provides a useful framework for examining what is known about the barriers low-income, urban parents face. Although there is clearly overlap between these various forms of capital, investigating each in turn permits an understanding of their relative influence on parent involvement in children's schooling.

Human capital. Most often defined in terms of the knowledge and skills a parent possesses, human capital is typically measured in terms of parents' level of education (Diamond & Gomez, 2004). Research shows that many low-income, urban parents have

limited formal education, creating barriers for their confident and effective involvement in their children's schooling.

Specifically, many parents are unsure of how their child's school operates or how to access resources that would help them to engage in their child's schooling (Chrispeels & Rivero, 2001; Diamond & Gomez, 2004; Jackson & Remillard, 2005; Mapp, 2003; Pena, 2000; Smrekar & Cohen-Vogel, 2001; Wood & Baker, 1999). For instance, Diamond and Gomez (2004) compared the involvement of working-class and middle-class African American parents using interviews and participant observations. They found that middle-class parents had a deeper knowledge of their child's school context than did working-class parents. Specifically, middle-class parents were more likely to gather information from family and friends to support decisions about which school their child should attend, and were better able to articulate knowledge of the curriculum (i.e., knowledge of instructional materials), content (i.e., what children were learning), and pedagogy (i.e., knowledge of classroom strategies).

Studies of immigrant parents in particular demonstrate a lack of familiarity with the school system, and consequently a feeling of frustration in terms of being able to identify the access points for involvement. In a study of Latino immigrant parents, Ramirez (2003) found that parents were not aware of information available to them through the school. Specifically, the school district had created a parent training folder suggesting how parents could work with their children, but none of the parents Ramirez interviewed knew that this folder existed. Similarly, Pena (2000) found that immigrant parents with no formal education in the United States perceived that they could not help their children because of their limited experience within the American school system;

they felt that because they did not understand what their child was studying at school they were not able to participate in the educational process.

Low-income, urban parents are hindered by their lack of content knowledge relative to what their children are learning in school. Jackson and Remillard (2005) examined how African American mothers from a low-income neighborhood conceptualized their roles in their children's mathematics learning. They found that mothers were actively involved in their children's math education, but the emphasis on conceptual understanding was new to most mothers who were products of a school system that had emphasized rules and procedures. Mothers found the standards-based math instruction unfamiliar; they did not recognize the conventions used or understand the logic behind them, and confessed that this made their involvement much more difficult. And they had few friends or relatives who did have the kind of experience to help them or their children.

Economic capital. Referring to a family's monetary resources, economic capital relates not just to income level, but more broadly to where families live, the quality of schools in their communities, their ability to purchase supplemental educational materials, and their ability to pay for tuition at private schools (Diamond & Gomez, 2004). Studies show that economic capital influences why and how parents are involved in their children's schooling. Specifically, low-income, urban parents have less economic capital which restricts their access to resources for educational involvement, making it more challenging to participate (Griffith, 1998; Jackson & Remillard, 2005; Kroeger, 2005; Lareau & Horvat, 1999; O'Connor, 2001; Patrikakou & Weissberg, 2000; Weiss et al., 2003).

Employment patterns of low-income, urban parents – working shift-work and/or working multiple jobs – limit parents' time and energy for involvement in their children's schooling. Weiss et al. (2003) studied the relationship between employment and parent involvement amongst low-income mothers. They found that mothers who worked or attended school part-time were more involved than mothers who did not work outside of the home; mothers who worked or attended school full-time were less involved than both mothers who worked part-time and mothers who did not work outside of the home. These results were evident even when the researchers controlled for differences in maternal age and education level, suggesting that employment levels can limit the amount of time available to meet family and child needs. Interestingly, Weiss et al. also found that working mothers developed creative strategies for overcoming such barriers to involvement. For instance, rather than going to the school, they communicated with teachers from their workplace, holding "meetings" over the phone; they also brought their children to work after school, providing them with a place to do homework.

Research shows that economic capital limits low-income, urban parents' choice of schools for their child. Diamond and Gomez (2004) found that middle-class parents tended to live in neighborhoods with higher quality schools nearby or had money to look outside of their neighborhood for schools. Low-income parents, on the other hand, were typically forced to send their children to local schools which were often of poor quality and where teachers were not well-versed in what it means to work with parents. Jackson and Remillard (2005) found that children in their study were not permitted to take home their hard-bound reference books for math because the teacher feared they would not be returned and the school did not have enough money to purchase new books. Without the

reference books, parents were uncertain of how to help their children with their homework. Some parents convinced teachers to let children have the books if they assumed responsibility for them, but the school's lack of resources put parents in the position of having to make requests and made parents feel that they were not trusted.

Social capital. Characterized by the resources derived from interaction in social networks, social capital refers to the social channels and contacts that provide parents with access to resources, information, and support (Diamond & Gomez, 2004). Research suggests that low-income, urban parents possess limited social networks which in turn restricts their ability to participate in their children's schooling (Diamond & Gomez, 2004; Horvat, Weininger & Lareau, 2003; Lawson, 2003; Miretzky, 2004; Weiss et al., 2003).

Research also indicates that low-income parents have distinct parent networks that differ from more middle-class parents. Horvat, Weininger, and Lareau (2003) examined social class differences in the relations between families and schools using interviews and observations. They found that in middle-class families, parental networks tended to be woven through children's lives and especially through the organized activities in which they participate, as well as through informal contacts with educators and other professionals. By contrast, working-class parental networks were organized along kinship lines; ties to other parents and professionals were considerably less common. Consequently, middle-class families studied by Horvat, Weininger and Lareau had access to many more resources through their parental networks than did working-class families. These network differences were also associated with differences in how parents handled problems with the school. Middle-class parents tended to react collectively, drawing upon

ties within their networks to advocate for their children, while working-class parents tended to undertake individual responses and had little concrete support to draw upon through their networks.

Similarly, Diamond and Gomez (2004) found that middle-class African American parents gained information about school selection through their social networks, including friendship and kinship ties; they discussed school selection with family and friends, who provided them with information about local schools. Middle-class parents also felt more comfortable visiting the schools, asking principals about educational processes, and choosing schools for their child. Lower-class parents, on the other hand, did not have such rich social networks through which to gather information about schools, and did not feel comfortable talking with principals and teachers in order to select their child's school.

Interestingly, Weiss et al. (2003) found that low-income, working mothers developed their own networks of support through their place of employment. Often times these networks crossed class lines. For instance, a mother who worked as a hairdresser talked to her clients in professional occupations about school assessment, while a mother who worked as a house cleaner brought her child to work so that she could practice her English language skills by talking to the middle-class family who employed her mother. These findings are supported by other studies as well (Calabrese Barton et al., 2004; Mapp, 2003).

Studies also reveal issues of social trust relative to parental relationships with schools. For example, Lawson (2003) found that low-income, cultural minority parents had negative stories to share about their child's school. As those stories were shared, the

trust of other parents toward the school and schooling became eroded. The erosion of trust in the school was perceived to cause parents to approach teacher-parent interactions with hostility, even when the school was trying to accentuate positive accomplishments by students.

Cultural capital. Referring to the cultural norms and dispositions within society, cultural capital reflects the notion that schools tend to value the cultural dispositions of the middle- and upper-classes and devalue those of the lower-class (Bourdieu, 1986). Research on low-income, urban parents presents two distinct stories relative to cultural capital.

The first story is focused on family culture or ethnicity, and what that means for parent involvement. Research results here are mixed. For instance, Griffith (1998) found that being Hispanic, African American, or Asian American was associated with lower parent participation in school activities. In a related vein, Pena (2000) found cultural differences amongst Mexican American families in terms of their involvement in their children's education. Specifically, she found that parents born in Mexico were less involved. She hypothesized that this was related to traditional family structures that privileged male expectations that women would stay at home rather than be involved at their child's school.

On the other hand, Lopez, Sanchez, and Hamilton (2000) found that immigrant Mexican Americans were more involved in their children's education than were U.S.-born Mexican Americans. Similarly, Wood and Baker (1999) found few differences between African American and Caucasian parents after controlling for the differential effects of educational attainment. These mixed results suggest that cultural capital is

more complex than many of these studies acknowledge. It takes into account structural power dynamics between parents and schools, societal expectations and norms relative to involvement practices, and, more concretely, cultural language barriers.

The second story told within the research is related to structural power dynamics. Specifically, research suggests that low-income, urban parents are hindered in their involvement practices by societal norms and power structures that privilege middle-class, Caucasian parents (Abrams & Gibbs, 2002; Carreon, Drake and Calabrese Barton, 2005; Coll et al., 2002; Lawson, 2003; Overstreet et al., 2005; Smrekar & Cohen-Vogel, 2001). For instance, Abrams and Gibbs (2002) explored issues of parent roles, access to power, and practices of inclusion and exclusion at an urban elementary school. During interviews with Latina mothers, the authors found that mothers felt power at the school was available only to White parents who participated in the Parent Teacher Association (PTA). Mothers perceived that power was closed to them because members of the privileged groups restricted minority parents' access to it. Interestingly, White parents who were interviewed by Abrams and Gibbs denied holding positions of power, insisting that power was open at the school; they did not see that their dominant cultural position permitted them to set the standards for PTA meetings specifically, and decision making more generally. In fact, White parents perceived that if they did not "organize" PTA meetings, nothing would be accomplished.

Similarly, Carreon, Drake and Calabrese Barton (2005) studied three working-class immigrant parents in order to understand their efforts to participate in their children's schooling. They found that these parents did not understand the role of the

PTA and how it attempted to benefit parents. For them, it was a middle-class, American structure that had little or no relevance within their lives.

In terms of parent-school relationships, Lawson (2003) and Smrekar and Cohen-Vogel (2001) found that low-income, cultural minority parents felt frustrated by the ways in which teachers addressed them and their children. Parents in these studies noted that schools and teachers tended to think of themselves as experts or authorities, and ignored the opinions of parents. Overstreet et al. (2005) found that one of the most powerful predictors of school involvement for parents of elementary and middle school children was the degree to which parents felt the school listened to them, and sponsored activities that made sense to them.

More concretely, studies of involvement amongst low-income, urban families point to the potential difficulties faced by parents for whom English is not their first language (Calabrese Barton et al., 2004; Carreon, Drake & Calabrese Barton, 2005; Coll et al., 2002; Lopez, 2001; Pena, 2000; Ramirez, 2003). For instance, in a study of parent involvement amongst three different immigrant groups, Coll et al. (2002) found that higher language comfort significantly predicted parent involvement. Carreon, Drake and Calabrese Barton (2005) found that not only did high-poverty, immigrant parents not understand the purpose of the PTA, but given the absence of translators at meetings, knowledge and participation was restricted to English speaking parents only. Ramirez (2003) also found that no translators were present at school meetings for predominantly Spanish-speaking parents. As a result, parents were concerned that they were not receiving all the necessary information.

Overall, research suggests several obstacles to involvement faced by low-income, urban families. They often possess limited knowledge and skills for navigating their children's school system and understanding what their children are doing at school. They have minimal economic capital which translates into limited time and resources for participating in the educational process. They typically have limited social networks that offer little or no access to other parents in their child's school, and they are excluded from the mainstream power dynamics within schools. Yet, despite these many obstacles, research shows that many low-income, urban parents do in fact participate in their child's schooling. These patterns of participation are discussed next, with a view towards the shifting definitions required to make visible such patterns of parental participation.

Redefining Parent Involvement

One of the major problems with the research on strategies for connecting parents and schools is the way in which strategies are defined and measured. Many studies employ Epstein's (1987; 1995) typology of parent involvement. This typology focuses on the frequency of specific actions undertaken by school staff, such as helping parents to create a home environment that supports children as students, encouraging parents to volunteer in their child's classroom, and including parents in school decisions. Such an emphasis on school-centered definitions of parent involvement strategies is only one piece of the picture. Equally important is an understanding of parents' own involvement agendas, priorities, and strategies relative to involvement.

In looking at research conducted with low-income, urban parents, it becomes evident that many studies let parents define involvement strategies from their own point of view. This definitional shift makes visible the fact that low-income, urban parents *are*

involved in their child's schooling, despite stereotypes and assumptions to the contrary. Research shows how parents create new spaces for involvement, redefining for themselves what parent involvement actually means. Two salient themes emerge from these studies: 1) authoring spaces, encapsulating the ways in which parents create both physical and virtual spaces for themselves relative to their children's schooling; and, 2) crossing contexts, representing the notion that low-income, urban parents are involved in their children's education not just at school, but within their everyday lives at home and in their community as well.

Authoring spaces. Studies show that low-income, urban parents create their own opportunities for involvement, authoring spaces and positioning themselves in ways that permit them to play a role in their children's schooling. For instance, several researchers define parent involvement in terms of presence. In this case, emphasis is placed not on what parents do in schools, such as volunteering in the classroom, attending PTA meetings, and helping with fundraising (Epstein, 2001), but rather on how they become part of the fabric of the school (Calabrese Barton et al., 2004; Carreon, Drake & Calabrese Barton, 2005; Jackson & Remillard, 2005; Mapp, 2003). In their study of three immigrant, working-class parents, Carreon, Drake & Calabrese Barton (2005) found not only that all three parents were involved in their children's schooling, but that their involvement practices converged around their desire to be present in ways that fit with their particular values and expectations for education. Each parent navigated a different kind of presence within their child's education – one helped in the classroom, another helped with school work at home, and another offered daily encouragement and support in conversations with his child. These results suggest that involvement practices amongst

low-income, cultural minority parents may well be highly contextual, depending upon the nature of parents' everyday realities.

Similarly, Calabrese Barton et al. (2004) studied parent involvement amongst high-poverty, urban parents. Through extensive interviews, they found that parents tried to be present in their children's schooling in whatever ways they could given their life circumstances. For some parents, that meant questioning their child's teacher when something did not seem right to them; for others it meant trying to be in their child's school periodically so they would know what was going on. Jackson and Remillard (2005) interviewed ten low-income, African American mothers about their involvement in their children's mathematical education. They found that mothers were highly involved in children's homework, using it as a mechanism for monitoring how well children were doing in math and knowing where they might need help. Many mothers wrote notes to teachers in order to clear up confusion over homework, again highlighting the importance of presence for these parents.

Other researchers have emphasized notions of empowerment relative to the involvement of low-income, cultural minority parents (Chrispeels & Rivero, 2001; Cooper & Christie, 2005; Mapp, 2003; Miretzky, 2004). For instance, Cooper and Christie (2005) assessed the impact of a 13-week parent education intervention program and found several program outcomes related to involvement. Of particular note, the program increased parents' confidence, prompting many Latino mothers to reevaluate the conventional gender roles they had assumed and motivating them to seek more power than they originally aspired to gain relative to their child's schooling. More concretely, some of the Latina mothers in this study shifted away from being stay-at-home mothers

who were reluctant to participate in their children's schooling because of fear and intimidation, and instead wanted to learn more about their rights, exert their voice, encourage their children to go to college, and advance their own educational pursuits.

Crossing contexts. Initial research also emphasizes that involvement amongst low-income, urban parents does not necessarily have to take place in the child's school. In fact, research on this population of parents shows that they are often involved in their children's education across multiple contexts (Calabrese Barton et al., 2004; Carreon, Drake & Calabrese Barton, 2005; Jackson Remillard, 2005; Lawson, 2003; Lopez, 2001; Mapp, 2003; Smrekar & Cohen-Vogel, 2001). For instance, Jackson and Remillard (2005) found that African American mothers were involved in their children's mathematics education in ways that were encouraged by the school – helping with homework and volunteering in the classroom – but they were also involved outside of school – using trips to the grocery store or time spent at the Laundromat to practice math skills. In other words, these mothers actively created opportunities for their children to learn math in everyday, realistic situations, and saw these opportunities as forms of involvement within their children's schooling. Arguably, middle-class, Caucasian parents engage in similar practices with their children outside of school. The point made by these studies is not that low-income, urban parents are inventing new ways to be involved in their children's education. Rather the point is that these parents see their everyday practices as significant forms of school-related involvement that are just as relevant as the more traditional involvement practices encouraged by schools.

Similarly, Smrekar and Cohen-Vogel (2001) explored ideas and attitudes about education amongst low-income, urban parents to understand their relationships with

schools. They found that when parents were asked to describe their involvement, they responded with almost conditioned responses, talking about attending meetings at school and helping with homework. But the more these researchers talked with parents, the more parents opened up, saying they wished that schools would legitimize other kinds of participation, ones that parents deemed more appropriate given their talents and time constraints. For instance, parents wanted to be able to participate in everyday things with their children, like sewing or carpentry. Many of the parents rejected the compartmentalized roles of parents and teachers, advocating instead a more seamless relationship between home and school.

Lopez (2001) studied parent involvement within a Mexican immigrant family. Like the other studies discussed here, he found first and foremost that these parents were in fact involved in their children's schooling. However, the story of their involvement took a very different form than the one told within mainstream literature on parent involvement. Lopez discovered that these parents saw their role as transmitting their work ethic to their children, teaching them to value school, and helping them to learn life skills. In fact, these parents took their children to work with them in order to help them learn these skills, and viewed this time spent together as an important aspect of school-related involvement.

Overall, research shows that low-income, urban parents participate in their children's schooling in various ways. However, their strategies for involvement tend to fall outside of the traditional, school-centric definitions of what it means to be an involved parent (i.e., volunteering in the classroom, serving on the PTA, participating in school fundraising activities). It becomes necessary then to reconceptualize what

involvement means for low-income, urban parents, broadening the definitional scope to include activities that are part of everyday life outside of school. Once the definitional scope is enlarged, it is easy to see the role that community-based organizations such as museums might play in helping to bring home and school together in alternative ways. The next section discusses research relevant to this notion.

The Role of Museum Programs in Facilitating Parent Involvement

Attempts to increase parent involvement in schools have become a regular feature of federal, state, and local education policies (Chrispeels & Rivero, 2001; Epstein, 1991). At the national level, parent involvement is one of the six targeted areas in the No Child Left Behind Act of 2001. Similarly, schools receiving Title I funding are required to spend part of that money on parent participation programs. As a result of these policies, many schools are designing intervention programs designed to increase parent involvement.

Research examining the impact of such intervention programs tends to assess child-based outcomes. For instance, several meta-analyses have sought to document the effects of parent involvement intervention programs on children's achievement (Cox, 2005; Fishel & Ramirez, 2005; Mattingly et al., 2002; Shephard & Carlson, 2004; White et al., 1992). Interestingly, these studies reveal mixed results, demonstrating a lack of evidence to support the benefits of such intervention programs for children. Perhaps this is because most of these interventions are designed from the point of view of school staff, privileging what they feel is important about parents' involvement – teaching parenting skills and emphasizing the role that parents can play in helping children with homework.

In a recent review of parent involvement literature, Pomerantz et al. (2007) identified three criteria for successful parent-based intervention programs. First, parent involvement initiatives need to empower parents within the school arena, helping parents to feel as though they have an important role to play in their children's development. In addition, such initiatives need to make parents feel that their child's school genuinely acknowledges and welcomes the role they have to play. Second, parent involvement initiatives need to create a context in which parents do not feel pressured to ensure that their children are performing to school-based standards. In short, the focus should be on the process of learning and not just on children's test achievement. Third, parent involvement initiatives need to be designed with an understanding of the importance of maintaining parents' positive affect and beliefs about children's potential. Taken together, these criteria clearly articulate what community organizations can bring to the table of parent involvement in the creation of non-traditional initiatives.

What is mostly ignored in the reviews of intervention-based studies are the effects of these programs on parents themselves – on their desires to be involved, on their strategies for becoming and staying involved, and on their relationships with school staff. Only by studying various strategies for connecting home and school will we understand which are most effective and why. A meta-analysis by Mattingly et al. (2002) provides some insight into these issues. Although these researchers sought to assess the influence of parent involvement programs on student learning, in examining the characteristics of each program they documented effects on parents as well. Specifically, 14 of the 41 studies in their sample had parent-based outcomes, either focused on enhancing parent communication with the school, enhancing parenting skills, increasing parent decision

making, or increasing parent volunteering. Analysis showed that of the 14 studies with these parent-based outcomes, few actually demonstrated improvement amongst parents. Again, this is likely due to the school-centered measures that were used within the programs and the assessment of these programs.

The primary question that arises from this research is this: How do we design intervention programs that reflect both the schools' and parents' priorities and values relative to involvement? There is some emerging evidence to suggest that community organizations are well positioned to bring parents and schools together in such ways, operating at the intersection of the home and school contexts.

Parent-School-Community Connections in Support of Parent Involvement

Although a substantial literature examines strategies for connecting home and school, most of it is focused on school-designed supports for involvement. Little is known about the ways in which nonschool programs can influence parent involvement. Lopez et al. (2005) studied four intermediary organizations – The Alliance for Children and Families, The National Coalition of Advocates for Students, The Prichard Committee for Academic Excellence, and the Right Question Project – in an attempt to document the ways in which they built parents' and school's capacity for parent involvement. Results revealed that these intermediary organizations provided a level of support and training that schools were unlikely to offer. They redefined parent roles, supporting parents as catalysts and leaders with the potential to change children's school experiences. In addition, they worked to build the cultural and social capital of parents, acknowledging the importance of such strategies if parents are to overcome the significant barriers to involvement that exist within school power structures. At the same time, these

organizations worked with schools to help them conceptualize new ways of thinking about parent-centered involvement. In essence, this study demonstrated that nonschool organizations and programs, in this case called intermediaries, can play a crucial role in parent involvement by offering alternatives to school-centered approaches, and by building the capacity of both parents and schools to come together in support of children's learning.

Chrispeels and Rivero (2001) examined the impact of parent education classes offered by a community group called the Parent Institute for Quality Education (PIQE). According to these researchers, PIQE played the role of a cultural broker, providing Latino immigrant parents with a community-based forum in which to consider their personal beliefs and roles relative to their children's education. Results indicated that PIQE helped parents to redefine their roles and sense of place within their child's schooling.

More research is needed to confirm these initial trends, and to better understand the many contextual influences on parent involvement strategies and mechanisms. Community programs such as those offered by museums, libraries, and community centers are well poised to bridge the gap between home and school in support of children's learning. Discussion now turns to the untapped potential of these programs for facilitating parent involvement.

Museums Facilitating Home-School Connections

Museums serve as a key component within the learning infrastructure of a community (Luke, Camp, Dierking & Coles, 2001). Museum programs can facilitate parent involvement in unique and significant ways. Such programs operate not within a

single context (i.e., school), but rather in the intersection of multiple contexts (i.e., school, home, community), thus broadening the concept of parent involvement to include a variety of settings and providing more opportunities for parents to participate in their children's learning. In addition, museums are not tied to instructional and curriculum mandates in the same way that schools are, making them freer to experiment with various approaches and strategies for parental participation. Finally, museums focus not just on students, but on learners across the lifespan, and more broadly on groups of learners (e.g., families with parents and children learning together). In this way, museums that take seriously the notion of enhancing parent involvement can draw upon experience and expertise in facilitating parent-child connections, a crucial aspect of parent involvement.

Despite the overwhelming potential of museum programs within the arena of parent involvement, there are very few studies exploring this potential. McCreedy and Luke (2006) conducted pilot research in support of this dissertation study. They found that a museum-designed parent involvement initiative can provide parents with valued opportunities to engage in their child's schooling in ways that fit with the realities of their lives. For instance, parents spoke of opportunities to better understand their child's interests; they identified instances where they felt welcome in their child's school through program activities, and articulated how that led to enhanced communication with their child's teacher. These findings point to the potential of museum programs to bring parents and schools together in support of children's learning.

At the same time, however, this study documented the challenges that museums face in trying to bridge home and school. For instance, in the case of the program investigated here, McCreedy and Luke (2006) found that it took multiple years for the

museum to gain the trust of partnering schools; museum staff struggled to understand the culture of each school, and some school staff members were wary of museum staff's agendas. These findings highlight the fact that while museum programs have the potential to facilitate parent involvement in ways that are different from school-based initiatives, they are not immune to organizational challenges and obstacles in the role that they play.

Two related bodies of research in the museum field support the notion that museum programs have unique potential to bring home and school together in support of children's learning. First, a growing number of studies are focused on family audiences in museums (Ellenbogen, Luke & Dierking, 2004). Research on families' motivations for visiting museums show that parents clearly value the learning opportunities offered by these institutions, not only for their child but for themselves as well. Parents perceive that spending time at the museum is an important way to spend quality social time with their child, and to help their child learn in ways they might not at school (Moussouri, 1997). Research on families' conversations in museums show that parents and children learn together through discussion. They talk about what they know from previous experiences, discussing what they see, hear, read, and do in relation to their family experiences and memories. Through these conversations, they reinforce past experiences and develop shared understandings (Ash, 2003; Borun et al., 1998; Crowley et al., 2001).

Studies on family learning in museums confirm the already important and well-established role that these institutions play in parent/child development. Museums provide a valued resource outside of school in which parents can support their child's ongoing development, and as such they have a long history of developing educational materials for family groups.

Second, research has examined the effects of museum-school partnerships at both an individual and organizational level. Museums have a long history of partnering with schools (IMLS, 2002), with many moving beyond the provision of single-visit school tours to the development of ongoing partnerships with schools over multiple years. Such partnerships impact participating teachers, increasing their knowledge of and attitudes towards specific content areas and enhancing their capacity for teaching such content, as well as participating schools, influencing school climate and culture relative to particular practices (Adams & Luke, 2000). While there is a growing body of literature on single-visit school trips to museums (Storksdieck, 2006), there are few empirical studies on museum-school partnerships. However, given the growing number of museums that have such partnerships with schools, there is every reason to believe that the current study has application to various museums across the country who are seeking to play a role in community building.

Further research is needed on the role that museums can play in connecting parents and schools in support of children's learning. What is more, such research should be well grounded in relevant theoretical models, given the largely atheoretical nature of much of the research on parent involvement strategies to date. With that in mind, the next section of this review discusses various theoretical models for describing ways in which parents can connect with their child's schooling.

Theoretical Models of Parent Involvement in Schooling

The body of research investigating strategies for connecting parents and schools, and in particular the role of community programs in facilitating such connections, is at an early stage of development. Researchers are still trying to understand the overall patterns

of such connections, and how they are best encouraged and maintained. As such, many of the empirical studies in this area lack a firm grounding in theory; they offer important descriptions of how low-income, urban parents think about and operationalize their involvement, but these descriptions are largely atheoretical, making it difficult to compare across studies and to predict with any accuracy the effectiveness of various strategies for connecting home and school.

Calls have been issued for the development of theoretical models that describe strategies for connecting parents and schools. There are several relevant models, including Epstein's typology of parent involvement (1987; 1995), Chrispeels' typology of parent involvement (1992; 1996), Grolnick and Slowiaczek's resource model (1994), and Hoover-Dempsey et al.'s psychological model (1997; 2005); see Table 2.1 below for an overview of each model. A critical review of each framework will show its deficiency for grounding further empirical work in this area. An in-depth discussion of Calabrese Barton et al.'s sociocultural model (2004) will demonstrate the relevance of this framework for this dissertation study.

Epstein's Typology of Parent Involvement

Epstein's model (1987; 1995) is based on a theory of how social organizations connect. She emphasizes three overlapping spheres – family, school, and community – as the major contexts in which children grow and learn. Children are best supported when goals are shared and people work collaboratively across these three contexts. Put simply, families, schools, and communities are jointly responsible for and influential in children's development.

Table 2.1: Overview of theoretical models related to parent/school connections.

Framework	Description	Key Constructs	Methods
Epstein (1987; 1995)	<ul style="list-style-type: none"> • Typology; • Based on social organization perspective of overlapping influence. 	<ul style="list-style-type: none"> • Parenting; • Communicating; • Volunteering; • Providing information; • Decision making; • Collaborating with community. 	<ul style="list-style-type: none"> • School & Family Partnership Scale; • Questionnaires; • Emphasis on frequency of behaviors.
Chrispeels (1992; 1996)	<ul style="list-style-type: none"> • Typology; • Focused on interactive relationship between home and school. 	<ul style="list-style-type: none"> • Two-way communication; • Supporting child's needs; • Learning how to work together; • Sharing teaching responsibilities; • Collaborating in decision-making. 	<ul style="list-style-type: none"> • Interviews; • Emphasis on frequency of behaviors.
Grolnick & Slowiaczek (1994)	<ul style="list-style-type: none"> • Resource-based model; • Focuses on resources within multiple dimensions of involvement. 	Types of involvement: <ul style="list-style-type: none"> • Behavioral; • Personal; • Cognitive/intellectual. 	<ul style="list-style-type: none"> • Questionnaires; • Emphasis on frequency of behaviors.
Hoover-Dempsey et al. (1997; 2005)	<ul style="list-style-type: none"> • Psychological model; • Seeks to explain parents' motivations for becoming involved in their child's school. 	<ul style="list-style-type: none"> • Parents' beliefs; • Parents' perceptions of invitations from others; • Parents' perceived life context. 	<ul style="list-style-type: none"> • Sharing the Dream! Parent Questionnaire.
Calabrese Barton et al. (2004)	<ul style="list-style-type: none"> • Sociocultural model; • Emphasizes parents' relationships with others. 	<ul style="list-style-type: none"> • Space; • Capital; • Authoring; • Positioning. 	<ul style="list-style-type: none"> • Interviews; • Focus groups; • Emphasis on quality of behaviors, as defined from parents' point of view.

Specifically, Epstein puts forth a framework of six major types of involvement, evolving from research and practice in elementary, middle, and high schools (Epstein, 1995). Each type of involvement includes many different practices of partnership. Each type presents particular challenges that must be met in order to involve all families. Finally, each type is likely to lead to different results for children, for parents, for teachers, and for school climate. The six major types of involvement are described as follows:

- Type 1: Parenting
 - Help all families establish a home environment to support children as students.
- Type 2: Communicating
 - Design effective forms of school-to-home and home-to-school communications about school programs and children's progress.
- Type 3: Volunteering
 - Recruit and organize parent help and support.
- Type 4: Learning at home
 - Provide information and ideas to families about how to help students at home with homework and other curriculum-related activities, decisions, and planning.
- Type 5: Decision making
 - Include parents in school decisions, developing parent leaders and representatives.
- Type 6: Collaborating with community
 - Identify and integrate resources and services from the community to strengthen school programs, family practices, and student learning and development.

The field has greatly benefited from Epstein's model. It is the most widely used model by researchers and practitioners (and thus well tested), largely because its dimensions are well-defined and it provides useful guidelines for practical applications connecting home and school. The model also acknowledges the multidimensional nature

of parent involvement, seeking to integrate behaviors and actions across the three main contexts in which it occurs – home, school, and community.

At the same time, however, there are serious limitations to the model. First, it is clearly focused on teacher and school-initiated behaviors, almost entirely ignoring parent-initiated involvement. It defines parent involvement according to goals defined by school staff; as such, it reflects the values and priorities of schools, not all of which may be shared by parents. Although there is little or no research on this point, the No Child Left Behind requirements for testing and reducing achievement gaps may in fact have further distanced the priorities of school personnel (successful standardized test performance by low ability students who could cause a school to be labeled as failing) and priorities of parents (teaching all children in a way that increases their motivation for learning along with their cognitive performance).

Second, Epstein's model does little to acknowledge potential differences between families. Although she suggests that each type of involvement should be customized to different families, there is little attention paid to culturally appropriate concepts and measures or to the differential supportive networks available to immigrant and non-immigrant parents or to middle class and working class parents.

Third, although the model claims to take into account community influences on parent involvement, this dimension is superficial at best. It encourages families to seek out community resources, and it encourages schools to partner with community organizations where possible, but it offers little guidance for community organizations themselves. How can they create programs that bring home and school together? Why should they want to play such a role?

A final weakness of the model stems from its application. To measure parent involvement based on her typology, Epstein developed the School and Family Partnership Scale, a 44-item teacher and parent report of parental involvement, with subscales measuring parental involvement at home, formal contact with school staff, at-school involvement, and perceptions of school climate (Epstein & Lee, 1995). Not only does this scale privilege the school's role in determining what counts as parent involvement, but it also emphasizes the frequency of such school-defined actions, by asking how often parents engage in these types of involvement. In this way, Epstein stresses quantity of parent involvement rather than quality of parent involvement.

Chrispeels' Typology of Parent Involvement

Similar to Epstein, Chrispeels offers a multidimensional typology of parent-school-community partnership. Her model emphasizes five major types of interactive relationships, including:

- Two-way communication;
- Support of the child, family, and the school;
- Learning about each other and how to work together;
- Sharing teaching responsibilities (including the presence of parent volunteers in the classroom);
- Collaborating in decision making and advocacy.

The strengths and weaknesses of this model are similar to those of Epstein's model. However, Chrispeels' work was borne from a desire to understand parent involvement amongst Latino families. As such, her model may be more culturally appropriate than Epstein's, although there is no concrete evidence to support such a suggestion. Some of

the same issues are neglected: the availability of supportive social networks, parents and children learning together, and expectations about power in the school.

Grolnick & Slowiaczek's Resource-Based Model of Parent Involvement

Recognizing that previous parent involvement models tended to focus on school-specific activities and events, Grolnick and Slowiaczek (1994) sought to develop a conceptualization of parent involvement in children's schooling that integrated both developmental and educational constructs. Thus, their framework defines parent involvement as "the dedication of resources by the parent to the child within a given domain" (Grolnick & Slowiaczek, 1994, p. 238). This definition recognizes that there is a difference between parents' overall involvement with the child, and their involvement in the child's schooling. In other words, parents may decide for various reasons to devote differing amounts of time and energy to what their child does in school than to their child's social activities or athletic activities. Specifically, Grolnick & Slowiaczek's model articulates the following three types of involvement:

- Behaviors (i.e., going to the school, participating in school activities such as open houses);
- Personal involvement (i.e., degree to which parent cares about school and has positive interactions with their child around school);
- Cognitive/intellectual involvement (i.e., exposing the child to stimulating materials).

A strength of this model is its inclusion of attitudinal components of parent involvement, something that neither Epstein (1987; 1995) nor Chrispeels (1992; 1996) take into account. It seems reasonable to assume that parents' attitudes towards school,

and towards their child's school experience, likely influence the ways in which they are involved in their child's schooling. However, a concern of this model is that the dimensions are broad, combining various specific types of parent involvement within each dimension. For instance, parent behaviors include activities at school and at home, despite increasing evidence to suggest that these two different types of involvement may lead to different outcomes for children (Pomerantz, 2007). In addition, this model has not been adopted by researchers in the field, and thus has not been tested in subsequent studies.

Hoover-Dempsey et al.'s Psychological Model of Parent Involvement

While Epstein's (1987; 1995) and Chrispeel's (1992; 1996) typologies, and Grolnick and Slowiaczek's resource model (1994), focus on what parents do to involve themselves in their child's schooling, Hoover-Dempsey et al. (1997; 2005) focus on why parents get involved in their child's schooling to begin with, arguing that this in turn influences the form that parent involvement takes.

In 1997, Hoover-Dempsey and Sandler reviewed psychological literature in order to develop a theoretical model explaining parents' involvement decisions and choices. In 2005, they revised their initial model based on a decade of research (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey et al., 2005). Their revised model suggests that parents' involvement decisions are based on three psychological constructs:

- Motivational beliefs, including parents' role construction for involvement (or their beliefs about what they are supposed to do relative to their children's schooling), and their sense of efficacy for helping the child learn;
- Perception of invitations to involvement from the school, teacher, and child;

- Elements of parents' life context that encourage involvement, including self-perceived time and energy, as well as self-perceived skills and knowledge.

Strengths of this motivational model include the fact that it is well tested, with at least a dozen studies in the field having grounded their work in Hoover-Dempsey and colleagues' thinking (for example, see Chrispeels & Rivero, 2001; Deslandes & Bertrand, 2004; Green et al., 2007; Reed, Jones, Walker, and Hoover-Dempsey, 2000). Also, it is firmly based in the psychological literature about parenting. However, as with the other parent involvement models, this one too has its limitations. Admittedly, Hoover-Dempsey and colleagues focus predominantly on middle-class, Caucasian parents who are already involved in their child's schooling. They include a brief discussion of life-context variables that may influence parents' involvement decisions – parental resources and family culture – but their definitions of these constructs are superficial at best, as they are seemingly not interested in the research on marginalized families' involvement decisions and patterns.

Like the previous models discussed, this model clearly separates the “what” of parent involvement (i.e., specific involvement forms and behaviors) from the “why” and “how” of involvement (i.e., parents' motivations and strategies for becoming involved). This separation is problematic, as it compartmentalizes our thinking about parent involvement in ways that miss the larger context. In fact, Hoover-Dempsey's model is often used in conjunction with Epstein's typology in the research in order to fully measure not only why parents are involved, but what they are actually involved in.

Overall, each of these four models has contributed to the larger field of parent involvement, helping to refine thinking about the ways in which parents and schools can

come together in support of children's learning. However, most share several serious limitations, in that they define parent involvement strategies almost entirely from a school-centered point of view, privileging the school's goals and expectations for parents; they do little to account for the larger context surrounding parents' involvement decisions and strategies, and as such leave little room for acknowledging the role that community programs might play; and they separate the "what" of parent involvement from the "why" and the "how", implying a distinction when in fact parent involvement strategies are best understood in integration. A discussion of Calabrese Barton and colleagues' (2004) Ecologies of Parent Engagement model demonstrates a more comprehensive, contextual, and parent-driven approach to understanding how to bridge home and school in support of children's schooling.

Calabrese Barton et al.'s Ecologies of Parent Engagement Model

The Ecologies of Parent Engagement (EPE) framework, developed by Calabrese Barton and her colleagues in 2004, emphasizes not *what* parents do to engage with their children's schooling – as is typically stressed in other parent involvement models (i.e., Epstein, 1987; 1995) – but rather *how* and *why* parents are engaged, and the complex *ways* in which their engagement occurs. Drawing upon cultural-historical activity theory, the EPE framework examines parents in relation to their environment and emphasizes the importance of parents' social context. It expands traditional definitions of parent involvement to include not just parents' actions and behaviors relative to schooling (i.e., Epstein's typology), but also their beliefs and orientations towards those actions: "Parental engagement...is more than just an object or an outcome. Engagement is a set of relationships and actions that cut across individuals, circumstances, and events that are

produced and bounded by the context in which that engagement takes place” (Calabrese Barton et al., 2004, p. 6).

Calabrese Barton and her colleagues argue that parent engagement (their preferred term over parent involvement) is the mediation of space and capital in relation to others in the school setting. Space is defined by drawing upon various notions of sociocultural environments in order to denote an area described by both virtual and physical boundaries (Holland, Lachicotte, Skinner & Cain, 1998; Lave, 1993; Lave & Wenger, 1991). More concretely, spaces (e.g., the teaching of science, the management of student behavior, parent networks at school) are created by individuals who come together for particular reasons as well as the roles they play; spaces are shaped by the rules and expectations for participating together in that space (these are the virtual boundaries), the tools typically enacted for that shared participation, and the mediating artifacts produced by that participation. Capital is defined by drawing upon Bourdieu’s (1977) definition – the human, social, and material resources one has access to and can activate for their own desired purposes.

Calabrese Barton and colleagues use these notions of space and capital to propose two key actions that foster parent engagement – authoring and positioning. “Actions that engage [parents] are both about how parents activate the resources available to them in a given space in order to author a place of their own in schools, and about how they use or express that place to position themselves differently so that they can influence life in schools” (Calabrese Barton et al., 2004, p. 8). Put simply, authoring is the process whereby parents create space(s) within their children’s school and their education by activating their various forms of capital. For instance, a parent might spend time in their

child's classroom, using human and social capital (time, one-one-one interactions with the teacher) to forge a personal space in which she gains information relative to what her child is learning. Positioning involves the expression of both space and capital to gain relative positions of power, influence or control within relationships and spaces relative to children's schooling. For instance, a parent might take note of the kind of homework and projects her child brings home, and use these assignments to ask questions of the teacher and make suggestions about her child's learning or about the curriculum or other aspects of the school situation that would potentially improve all children's learning.

Parents both author and position themselves, and are authored and positioned by others, in relation to their children's schooling. For Calabrese Barton et al., the goal of parent engagement is to create multiple and varied opportunities for parents to author and position, finding comfortable and productive ways to be involved in their children's schooling.

As stated earlier, the EPE framework serves as a useful starting point for the building of a model within this study. It takes into account the larger social and cultural context around parents' participation, thus framing involvement more broadly than just school-centered activities. It takes into account the "what," "how," and "why" of involvement, thus offering a holistic model for understanding parent involvement. And it puts forth integrated and observable mechanisms through which parent involvement occurs, thus providing an existing theoretical framework that can be adapted and refined within the context of this study. What it does not do is articulate the role that an intervention program might play in facilitating parent involvement; this study proposes to take this theoretical framework to that next step.

Summary

This chapter has reviewed four key aspects of parent involvement research and theory: 1) the impact of parent involvement on children's achievement; 2) strategies for connecting low-income, urban parents and schools, including why parents get involved, factors that influence their involvement, and shifting definitions of what it means to be involved; 3) the role of community organizations and programs in facilitating connections between parents and schools; and 4) theoretical frameworks relevant for grounding an examination of how parents create and sustain connections with their child's schooling.

Taken together, these various strands of research and theory serve to situate the current study within the literature on parent involvement, creating an argument for why such a study is needed. Research on the impact of parent involvement on children's achievement reveals mixed results. Certainly parent involvement makes a difference in children's achievement, but it is not clear exactly what that difference is and under what conditions it can be fostered. This is likely due to assumptions made about the strategies that parents use to connect with their child's schooling. A research shift is required, one that focuses on the underlying processes of involvement – parents' perceptions of why and how they are involved, and opportunities they see (and take) for such involvement. Research on parents' strategies for involvement suggest that motivations matter, as do beliefs about what role parents can play in their children's learning. However, for low-income parents in particular, there are societal obstacles to involvement that parents must overcome, in the form of limited capital – social capital, economic capital, and cultural capital.

Much of the research on the processes of parent involvement privilege school-centered strategies for involvement, focusing predominantly on school-based behaviors. This study proposes a broader focus, one that includes educational behaviors that take place inside and outside of school. This more expansive focus highlights additional players within the parent involvement arena, such as museum programs that have an important contribution to make in bringing parents and schools together. Surprisingly, there is little research in this area. With that in mind, the current study was driven by the following research question: *How does a museum program provide opportunities for parents in a low-income, urban community to engage in their child's schooling?* The discussion now turns to the study's design and methods.

Chapter Three: Research Methods

Research Design and Approach

Overview

This study is qualitative in nature, using a grounded theory approach to understand parents' perceptions, elicited retrospectively, of how their participation in a museum program afforded them opportunities to engage in their children's schooling. The research questions driving this study necessitated a qualitative approach. Qualitative methods are especially useful in the "generation of categories for understanding human phenomena and the investigation of the interpretation and meaning that people give to the events they experience" (Polkinghorne, 1991, p.112). This study sought to generate theoretical propositions about parental interactions in relation to their child's schooling, a phenomenon that consists of feelings, thought processes, emotions, actions, and orientations to action that are difficult to investigate through quantitative procedures.

Grounded Theory Methodology

One of the major paradigms of qualitative inquiry, grounded theory was originally developed by sociologists Glaser and Strauss (1967). As articulated by these researchers, it is a general methodology for developing theory that is derived from empirical data that has been systematically gathered and analyzed: "Theory evolves during the actual research, and it does this through continuous interplay between analysis and data collection" (Strauss & Corbin, 1994, p. 273). Within this approach, theory is defined as a set of well-developed themes or concepts that are systematically interrelated through statements of relationships to form a theoretical framework that explains some relevant social, psychological, or educational phenomenon. The statements of

relationship explain who, what, when, where, why, how, and with what consequences an event (such as parent involvement in schooling) occurs (Strauss & Corbin, 1990).

Grounded theory methodology can be used in one of two ways. First, it can be used to generate a theory from the data where one does not exist. Second, it can be used to elaborate and modify an existing theory, where such a theory is relevant to the area of investigation (Strauss & Corbin, 1990). It is the latter approach that was taken in this study, given that the goal of the research was not to create a theory of parent involvement but rather to draw upon an existing theoretical framework in order to describe the role of a museum program in facilitating parent involvement. As such, this study uses grounded theory methodology in the tradition of Strauss and Corbin (1990), as opposed to the more rigid version advocated by Glaser (1992).

Although it emerged from sociology, grounded theory has gained widespread use within multiple disciplines, including anthropology, psychology, and education. As evidence of its current academic acceptance, an advanced search within PsycINFO – using the term “grounded theory” and limiting results to articles published in peer-reviewed journals over the last 10 years – yielded approximately 1,500 records; a similar search within Digital Dissertations yielded approximately 4,000 records.

A specific example of how grounded theory has been used within a recent developmental study provides a more detailed sense of the value of this method. In an article published in *Child Development*, Larson and Brown (2007) describe results from their investigation of the processes of emotional development as they are experienced by adolescents. Given that little is known about how adolescents’ emotions unfold in particular educational contexts, Larson and Brown used grounded theory as a way of

trying to understand the complexity of this phenomenon, from the point of view of adolescents themselves, using their language and experiences. In their opinion, grounded theory provided an avenue for understanding how emotions develop in relation to real-life cultural contexts, in this case an organized youth program. The method also permitted the development of theoretical propositions about these processes, and how the setting facilitated the processes. It is for all of these reasons that this dissertation study was also based in the grounded theory tradition.

Research Context

This study was conducted within the context of a parent involvement program designed by The Franklin Institute Science Museum, Philadelphia, PA. Called *Parent Partners in School Science (PPSS)*, this 5-year, National Science Foundation-funded initiative targeted parents and children in Kindergarten through 4th grade at three urban elementary schools in Philadelphia. Its overall goal was to bring parents and school staff together in support of elementary children's learning, with an emphasis on building home-school connections. The program started in September 2001 and ended in June 2006.

Program Start-Up and Implementation

Upon receipt of initial program funding in 2001, museum staff administered a call for elementary schools within the Philadelphia School District to apply for participation in *Parent Partners in School Science*. The application process required that each school identify the extent and nature of existing parent involvement in their school, and to articulate why participation in a program like this would complement their current parent involvement efforts. Schools were also asked to describe how they would involve parents

in the program, extending it beyond just school staff. At the time of this application process, the Philadelphia School District was subdivided into approximately 18 clusters, each with a cluster leader. An invitation was sent to each cluster leader, asking that they also submit one elementary school for consideration in the program, using these same criteria.

A total of 10 elementary schools applied for participation in *Parent Partners in School Science*. Three were selected, one in northeast Philadelphia, one in north Philadelphia, and one in west Philadelphia. Selection criteria for these schools included the likelihood for parent involvement within the school, demographic diversity, and participation in an initial information meeting at the museum.

In the first year of the program (2001-2002), each of the three participating schools formed program planning teams, consisting of the Principal, 3 teachers, and 3 parents, one of whom was the President of the Home and School Association (HSA). These teams were designed to establish an implementation and communication structure within the school that drew upon and supported the existing culture within that school, and that included both teacher and parent input throughout. Planning teams were responsible for recruiting parents and children to participate in the program, identifying mechanisms for keeping parents and teachers informed of program activities, and coordinating program activities as they were implemented. Each team was given a budget of approximately \$12,500 from The Franklin Institute Science Museum to support these efforts. In this way, museum staff attempted to involve parents not only in the creation of program activities, but also in the ongoing implementation of the program at each of the schools.

Program Activities

Each year, the program consisted of three main activities, each developed by museum staff with input from teachers and parents: 1) events, held at both the museum and at the school; 2) home-based activities; and 3) school-based projects. Approximately 3-4 events were held during each year of the program; events typically lasted 1-2 hours in length. Some were held at the museum. For these events, transportation was provided for parents and children. While at the museum, families were given free time to explore. Other events were held at the school. These events were more focused in nature, inviting parents and children to participate in various in-depth science experiments together.

Home-based activities, called Exploration Cards, were designed to offer non-threatening opportunities for parents and children to engage in simple, science explorations together, using materials that are typically found around the home. For example, one activity involved sending home "Post-It" notes imprinted with the phrase "Science is Everywhere." Parents and children were encouraged to stick the small papers around their house wherever they saw science, and then take each other around and discuss their choices in terms of how they related to science. Another activity challenged children and their parents to explore the concept of balance by building a paper mobile together. Approximately 5-6 Exploration Cards were sent home by the school each program year; in many cases, the science teacher at the school administered Exploration Cards as a form of homework.

Finally, each of the three schools created what was called a Legacy Project, a community-based project designed by teachers and parents at the school to create a sustainable teaching resource for the school. For instance, one school created an on-site

garden, and they continue to use it not only as a teaching tool within the science program, but also as a way to involve parents in school activities (a parent group helps to care for the garden during the year).

Program Participation

Parents of children in Kindergarten through 4th grade were encouraged to participate in the program through mechanisms such as flyers sent home with children, mention of the program in the school newsletter, and teacher communication about the program during parent-teacher conferences and other interactions. Parents were free to participate as little or as much as they wanted. Specifically, they could structure their program experience in ways that worked best for them by picking and choosing from the program activities offered throughout a given year. The “free-choice” nature of the program is typical of museum programs. Unlike many intervention programs that target parents, aiming to teach them concrete strategies for engaging in their child’s homework or to help them identify opportunities for volunteering their expertise within their child’s classroom, *Parent Partners in School Science* sought to put parents in control of their participation, offering a series of compelling family-based activities in which parents could engage with their child around science learning.

Study Participants

Gaining Access

The researcher had an existing relationship with the museum staff who developed the program, and with school staff and parents who participated in the program. Specifically, the researcher served as the program evaluator for the *Parent Partners in School Science* program during its first 4 years, and subsequently conducted preliminary

fieldwork with parents in support of this dissertation study (Luke & Foutz, 2006). This relationship facilitated access to participating schools and parents, and helped the researcher to establish an immediate rapport and build trust with parents, strategies which are central to qualitative inquiry.

An initial sampling list for this study was built using a database of 353 parents who completed and returned exit-program questionnaires in the Spring of 2006 as part of the summative program evaluation (see Appendix A for questionnaire).³ Parents were asked on the questionnaire to identify themselves and their children by name. Using this information, the researcher worked with administrative staff in the schools to identify children who were still attending those schools in the Spring of 2008, when this study was initiated. A total of 141 children were identified. Letters were then sent home to parents of these children via classroom teachers (see Appendix B for parent recruitment letter). Sixty-two parents returned the letter; of those, 45 indicated a willingness to participate in the study and provided their contact information.

Comparisons between these 45 parents and the remaining 308 in the database revealed three important considerations. First, parents who agreed to participate in this study had attended more program events (Mann Whitney $U=3137.5$, $p=.000$) and completed more Exploration Cards (Mann Whitney $U=3624.5$, $p=.000$) than the other parents in the database. Second, parents who agreed to participate in this study rated the program higher in terms of its impact on their parent involvement as measured by a 6-item scale on the program-exit questionnaire (Mann Whitney $U=4502.5$, $p=.003$). Third,

³ One of the three participating schools, located in West Philadelphia, was not included in the study, since the museum program was not consistently implemented within this school.

parents who agreed to participate had higher education levels than others in the database ($\chi^2=5.261$, $df=2$, $p=.07$). Taken together, these results suggest that the parents who agreed to participate in this study represented a “best case scenario;” they were clearly committed to education in general and to the program specifically, and believed that it made a difference in their lives.

This sample bias has both advantages and disadvantages. On the one hand, it maximized the likelihood of identifying parent involvement mechanisms afforded through the museum program. It would have been potentially difficult to identify these mechanisms amongst a group of parents who only rarely participated in the program and for whom the program likely did not afford much in terms of involvement strategies. On the other hand, there are clear limitations in terms of the generalizability of the study results. Specifically, findings from this study apply only to “best case” program parents, those who participated in multiple program activities and those who perceived that the program had an impact on their involvement practices. In addition, given that many parents in the sample had college degrees, results may not fit with what is known about parent involvement in low-income, urban communities.

Parents were sampled purposively from the list of 45 willing participants. Grounded theory calls for the use of theoretical sampling, a strategy that involves sampling places, people, and events that will maximize opportunities to discover variations among emerging categories, and to enrich categories in terms of their properties and dimensions (Charmaz, 2006; Strauss & Corbin, 1990). Theoretical sampling does not involve sampling for population representativeness (Charmaz, 2006).

The first parent in this study was selected because of her in-depth participation in the program, and because she had been in contact with museum staff since the program's completion, sharing her thoughts on the difference the program had made in her life. Subsequent parents were selected in order to maximize a diverse set of program experiences that would inform and enrich the generation of categories from the data. For instance, the first parent interviewed talked about the importance of interacting with teachers, and in particular interacting with teachers outside of the formal, hierarchical teacher-parent relationship that is often at play in schools. Following this interview, the researcher wanted to better understand the conditions in which these informal parent-teacher interactions occurred; she next interviewed a parent who had been part of the Home and School Association at the school for many years in order to see how this position in the school influenced the museum program's impact on her. As another example, after the fifth interview, the researcher noted that parents felt the program helped them to better understand what their children were doing at school; she next interviewed a parent who had immigrated from India to see if the program made a difference for someone who might not have been as familiar with the American school system. In this way, sampling proceeded such that the researcher could "follow hunches about where to find data that will illuminate...categories" (Charmaz, 2006, p. 103).

Parents were contacted by telephone. At the outset of the call, the researcher introduced herself, described the purpose of the study, and asked parents if they were willing to participate. Four parents who were contacted refused participation; two simply said they were not interested, and two indicated that they did not speak English. For those parents who agreed to participate, the researcher scheduled an interview at a time that

was convenient for the parent. The informed consent form was then mailed to the parent, who signed it, and mailed it back to the researcher prior to the scheduled interview (see Appendix C for the informed consent form).

Participant Descriptions

A total of 20 parents participated in this study, in keeping with the recommended sample size for grounded theory research (Strauss & Corbin, 1990). Such a sample size is large enough that it permitted sufficient variation in emerging categories, but small enough that it was achievable given the intensity of data collection and analysis.

All were parents from low-income, urban neighborhoods in Philadelphia, PA. Individual household income data ranged from approximately \$20,000 for a family of three to approximately \$40,000 for a family of four.⁴ All parents in the sample had children who attended one of two elementary schools that participated in the museum program studied here (referred to as Schools A and B). School A was located in north Philadelphia, amidst a predominantly working class population. During the 2005-2006 school year, 32% of students were African American, 42% were Caucasian, 12% were Asian, 10% Latino, and 4% other. Fifty percent of students qualified for free- or reduced lunch. School B was located in northeast Philadelphia, amidst a large Hispanic and African American population. During the 2005-2006 school year, 50% of students were

⁴ Although there is no commonly agreed upon definition of “low-income,” a common measurement used by the U.S. Census Bureau is twice the federal poverty level, or approximately \$40,000 or less (U.S. Department of Housing and Urban Development, 2000). Using that measurement, parents in this sample fit the definition of low-income.

African American, 2% were Caucasian, 20% were Asian, 26% were Latino, and 2% were other. Eighty-three percent of students qualified for free or reduced lunch.

All parents completed their participation in the museum program as of 2006. Ten of the 20 parents had participated in a focus group about their program experience in the Fall of 2006, conducted by the researcher. Table 3.1 below summarizes the key characteristics of study participants.

A list of interview questions was developed to guide interviews with initial participants; these questions were open-ended in nature, focusing on two related themes: 1) the nature of parents' participation in the museum program, and their memories of the program; and, 2) parents' perceptions of how their program experience may have provided them with new or extended opportunities for involvement in their child's schooling (see Appendix D for interview questions). This list of questions worked well for the first few interviews, but had to be modified as questions became more targeted, based on the emerging categories. The principles of grounded theory data collection are based on the notion that data collection and analysis occur in an evolving and iterative fashion, with each informing the other. With this in mind, interview questions necessarily become increasingly specific as data are analyzed, conceptual categories emerge, and the researcher seeks to better understand the nuanced details of each category.

Table 3.1: Participant descriptions.

	Parent Information	Child Information	School	Program Participation
1	Mother; Caucasian; Some graduate school	Twin daughters 14	A	6 years (10 events; 17 Cards; legacy project)
2	Mother; Caucasian; Associate degree	Daughter 16; Twin sons 14	A	6 years (17 events; 21 Cards; legacy project)
3	Mother; Caucasian; Technical degree	Daughter 14	A	5 years (4 events; 9 Cards)
4	Mother; African American; Associate degree	Two sons 9 & 10	B	4 years (8 events; 2 Cards; legacy project)
5	Mother; Caucasian; Technical degree	Son 12	A	5 years (5 events; 8 Cards)
6	Mother; Asian; College degree	Son 11	A	4 years (5 events; 11Cards)
7	Mother; African American; Some college	Son 14	B	4 years (7 events; 14 Cards)
8	Mother; Caucasian; Associate degree	Daughter 14	A	6 years (17 events; 24 Cards; legacy project)
9	Father; Caucasian; High school degree	Son 11	A	4 years (6 events; 6 Cards; legacy project)
10	Mother; Caucasian; Associate degree	Daughter 14	A	6 years (16 events; 26 Cards; legacy project)
11	Mother; African American; Some college	Daughter 12	B	4 years (3 events; 3 Cards)
12	Mother; African American; Some college	Daughter 14 & son 11	A	3 years (19 events; 15 Cards; legacy project)
13	Father; African American; Technical degree	Son 13	B	2 years (7 events; 10 Cards)
14	Father; Asian; High school degree	Daughter 13	B	6 years (8 events; 4 Cards)
15	Mother; African American; College degree	Son 11	A	2 years (5 events; 3 Cards)
16	Mother; Caucasian; Some high school	Daughters 8 & 11	A	3 years (3 events; 3 Cards; legacy project)
17	Mother; African American; College degree	Sons 11 & 15	A	3 years (6 events; 11 Cards; legacy project)
18	Mother; Caucasian; Some graduate school	Daughter 10 & son 8	A	3 years (12 events; 2 Cards; legacy project)
19	Mother; African American; College degree	Daughter 10	A	2 years (7 events; 5 Cards)
20	Mother; Caucasian; College degree	Daughter 10	A	3 years (5 events; 3 Cards)

For example, during the first three interviews, all participants talked about the importance of interacting with teachers outside of the formal, school-sanctioned methods of communication. In subsequent interviews, the researcher sought to clarify the meaning of these informal interactions with teachers. Was this phenomenon rooted in Calabrese Barton's (2004) notion of social capital, or increased access to a school network of resources through the teacher? Were parents finding those access points on their own, or were they offered by teachers? Would Hoover-Dempsey's (1997; 2005) notion of a positive school climate in which teachers extend invitations for involvement better describe what was most salient about parents' informal interactions with teachers? Subsequent interview questions sought to gather answers to these analytical questions by more specifically asking parents exactly how these interactions with teachers occurred, what parents valued about them, and how exactly they made use of those interactions.

Interviews were conducted via telephone, at parents' request. When scheduling interviews, the researcher initially offered the option of a face-to-face interview, giving parents multiple locations from which they could choose, including their home, the child's school, or a public place in their local community (i.e., library, local coffee shop). However, the first three parents interviewed specifically asked if the interview could be done via telephone, explaining that it would be most expedient for them. In order to adapt the study to the realities of parents' lives, the researcher continued to offer all parents the option of either a face-to-face interview or a telephone interview; all 20 parents chose a telephone interview. Telephone interviews are an increasingly accepted mode of data collection. Although they lack information provided by nonverbal cues and can result in higher rates of social desirability, they are more convenient for participants and thus are

more inclusive. For the most part, studies suggest that responses gathered through telephone interviewing are comparable with those gathered through face-to-face interviewing (Bailey, 1994; Sudman & Bradburn, 1982).

Interviews ranged in length from 18 minutes to 81 minutes. Typically, initial interviews were the longest. As categories began to emerge from the data, and the researcher became more focused and targeted in her questions, interviews often became shorter. This was in part because they were being used to clarify and elaborate rather than generate new information. Each interview was digitally recorded using a conference call service (<http://www.c3conferencing.com>), and recordings were transcribed in full by a transcription company (<http://www.verbalink.com>) with staff who have experience in educational research in museums. A sample transcript is included in Appendix E.

Conducting Follow-Up Interviews

In February 2009, the researcher conducted follow-up interviews with three of the 20 parents. These interviews permitted the researcher to gather additional material to elaborate existing categories, and to check the extent to which the categories and theoretical propositions fit with participants' experience. Initially, the researcher had planned to conduct a large focus group discussion, to take place at The Franklin Institute Science Museum. However, during their initial interview, many parents indicated an unwillingness to attend due to their schedules and anticipated constraints in actually getting to the museum. Follow-up telephone interviews were conducted instead in order to again adapt to the realities of parents' lives. Albas and Albas (1988; 1993) have found individual interviews to be an effective way to generate new properties of a category or a range of categories within grounded theory methods.

Parents were again selected purposively in order to check categories and theoretical propositions in diverse ways. Interviews were conducted by telephone, since this was parents' preference (see Appendix E for a list of follow-up interview questions). Interviews were digitally recorded, but not transcribed. Instead, the researcher worked from the recordings themselves to gather relevant feedback from parents, and incorporate it into the analysis procedures. This strategy is supported by Strauss and Corbin (1990, p. 30), who note "the general rule of thumb here is to transcribe only as much as is needed." They suggest that especially at the end of a study, it is not always necessary to transcribe in full participants' responses, since the goal at that point is typically to illustrate and confirm existing categories, not generate new categories.

Data Analysis Procedures

Overview

The focus of grounded theory is to ascertain patterns or typologies of actions and their meanings for people as they experience a social phenomenon. Analysis procedures revolve not around describing a particular phenomenon, as is the case with other qualitative methods, but rather they focus on conceptualizing a particular phenomenon, and generating hypotheses about the dominant social processes that drive it.

Data analysis occurs through the systematic coding of data, a process that is guided by two complementary analytic principals – making comparisons, and asking questions of the data (Charmaz, 2006; Strauss & Corbin, 1990). Grounded theory analysis is often referred to as the "constant comparative method" given the strong emphasis on making comparisons. Data analysis is conducted in an ongoing and iterative fashion as the data are collected, with analysis directing the researcher's focus (i.e., the

participants sampled, the types of questions asked) as data collection continues. As data are analyzed, they are constantly compared against each other. Recent codes are compared against earlier codes, and grounded codes are compared against more abstract codes all in an effort to generate rich, integrated theoretical hypotheses of the phenomenon being investigated (Charmaz, 2006; Glaser, 1992; Strauss & Corbin, 1990). In addition to making comparisons, the grounded theory researcher also asks questions of the data during analysis in an attempt to go beyond surface level meanings and interpretations. By inquiring about the circumstances, conditions, and context around emerging data, the researcher can better understand the relevant dimensions of the phenomenon under study.

Coding

Grounded theory analysis involves the systematic and iterative use of different types of coding in order to move from the data itself to more abstract conceptualizations of the phenomenon being investigated. There exist various descriptions of grounded theory coding, each with slightly different terminology, but for the most part these descriptions converge around three different coding levels (Charmaz, 2006; Glaser, 1992; Strauss & Corbin, 1990). Initial coding (or open coding as it is also known) involves the identification of “in vivo” concepts, or concepts that are grounded in participants’ responses and experiences (Charmaz, 2006; Strauss & Corbin, 1990). Focused coding involves categorizing these concepts in order to synthesize and explain larger segments of data (Charmaz, 2006). Through focused coding, higher order categories are developed and their properties and dimensions are fully defined. Finally, selective or theoretical

coding involves specifying relationships between the categories in order to integrate them into an analytic story (Glaser, 1992; Strauss & Corbin, 1990).

What follows is a detailed description of the coding procedures employed in this study. A three-part framework is used to explain the step-wise, comparative approach taken within data analysis; the framework includes these phases: 1) identifying concepts; 2) developing categories; 3) generating theoretical propositions. Although the framework makes the analysis process appear more linear than it was, it also makes visible the overarching pathway through which the researcher arrived at the theoretical propositions presented in the next chapter. As each phase is discussed, relevant coding types are delineated, examples are offered, and key principals are emphasized in order to clarify the complex and cyclical process of data analysis employed within this study.

Identifying concepts. At the outset of the study, initial coding was used to identify the range of ways in which parents felt the museum program had facilitated their involvement in their children's schooling. Following an interview, a transcript was read in its entirety, and each action or incident described by the parent was coded, using a qualitative software program called HyperResearch. Initial coding was entirely emergent, drawing upon parents' language to capture their perspective as concretely as possible, thus identifying "in vivo" concepts within the data. Where possible, gerunds were used to label concepts, keeping the focus on actions as opposed to descriptive themes or patterns (Charmaz, 2006; Glaser & Strauss, 1967). Table 3.2 below provides examples of how concepts were coded from interview data.

Table 3.2. Examples of concepts identified within early interview transcripts.

Interview Data	Concept
“I became more aware of what was going on in the school. I was not aware of the inner politics of the school. But being in there, you saw it. And that may not be a good thing, but on a positive note, I liked being there and being involved with the kids.” (T10)	Being more aware of politics in the school Having mixed feelings about what she saw
“I’ll say more involved as far as finding out what they’re interested in. Like I never knew they liked science like that until we started doing the little projects and stuff.” (T7)	Getting more involved Seeing that kids were interested in science
“Because you got more involved with the – I guess the teachers, on a fun level. Not report cards or back to school, you know, where you might be working in the park or you might be making ice cream in a bag and having fun and laughing. That kind of involvement.” (T2)	Getting more involved with teachers on a fun level Being involved in a different way

The identification of concepts was a primary focus within the analysis of the first several interviews, in keeping with Strauss and Corbin’s (1990) notion that concepts serve as the basic building blocks of grounded theory analysis. Approximately 50 concepts were identified across these interviews; during this process, concepts were compared within interviews and between interviews. Once it was clear how these concepts grouped into higher-order categories, a process discussed next, initial coding ceased in keeping with principals outlined by Glaser (1992).

Developing categories. The development of categories is central to grounded theory analysis. The goal is to arrive at one core variable that specifies what is most relevant about the phenomenon under study, and one or more categories that fully describe key elements and processes of that core variable. Categories should be

conceptually dense, meaning that they are as robust and detailed as possible in terms of their properties and dimensions (Charmaz, 2006; Strauss & Corbin, 1990).

The first step in developing categories was to group similar concepts that were identified through initial coding; this process is known as categorizing (Strauss & Corbin, 1990) and involves what Charmaz (2006) calls focused coding. Here, the most significant and/or frequent concepts were synthesized in order to explain larger segments of data (Charmaz, 2006). Initial concepts were subsumed into larger, more holistic categories which explained multiple actions. For example, Table 3.3 shows how several concepts relating to parent-teacher interactions were grouped to arrive at a preliminary category called “Developing informal relationships.” Using this same process, a series of 8 preliminary categories were developed; through further data collection and analysis, one was culled out as the core variable within the study, and the rest were grouped to form the two core categories (this is discussed further in the next phase below).

Charmaz (2006) notes that equally important when categorizing data is making decisions about what concepts are not relevant to the analysis. In this study, there were only a few concepts that were ignored at this point, all having to do with processes that were outside of the frame of parent involvement (for example, one parent described in detail the caretaking process of the school’s garden; those concepts were not deemed relevant for developing categories).

Table 3.3. Examples of moving from initial codes to categories through focused coding.

Initial Codes (Selected)	Preliminary Categories
<ul style="list-style-type: none"> • Being more aware of what was going on in the school • Finding out what kids were doing at school • Understanding kids' learning environment • Seeing how they were teaching science at school • Being more interested in what son was learning in science at school 	Understanding what goes on at school
<ul style="list-style-type: none"> • Getting to know other parents • Getting to know teachers outside of formal classroom relationships • Getting more involved with teachers on a fun level • Being on a first-name basis with the principal • Communicating with teachers in a relaxed way 	Developing informal relationships
<ul style="list-style-type: none"> • Going into the school more • Feeling more comfortable in the school • Volunteering more in the classroom • Being involved in kids' science learning specifically • Feeling like she had a legitimate reason to be in the school 	Being present

In this study, a fundamental component of categorizing the data was toggling between inductive and deductive analytical frames in order to honor emergent categories from the data while also testing their fit against constructs from the Ecologies of Parent Engagement model (Calabrese Barton et al., 2004). This too was done in an iterative, comparative fashion. As preliminary categories were identified, the researcher examined them against the constructs from the EPE model and asked questions about their fit. For example, one of the preliminary categories that emerged early on was “Developing informal relationships.” This category seemed to correlate with the construct of social capital from the EPE model, which specifies that parents draw upon the relationships and interactions they have with others in order to find ways to engage in their children’s

schooling (Calabrese Barton et al., 2004). Through careful analysis of parents' words and phrases, and clarification in subsequent interviews of what was really important about those relationships and interactions, the researcher sought to clarify if parents were in fact referring to the building of capital or if perhaps they were using these relationships and interactions to illustrate ways they had come to feel more invited and welcomed within the school, a category more akin to Hoover-Dempsey's (1997; 2005) construct of school and teacher invitations for involvement. In this way, the researcher moved between inductive and deductive modes of analysis in a comparative fashion to determine the fit of the EPE constructs within the data at hand.

Memos were used to document the emerging properties and dimensions of categories. Memo-writing is a crucial strategy in grounded theory providing the link between data collection, coding, and the creation of theoretical propositions. Throughout the development of categories, the researcher wrote memos detailing her thought processes, and seeking to explain in as much depth as possible each relevant category as it emerged from the data (see Appendix G for a sample memo).

Once the core categories were identified, emphasis was placed within both data collection and analysis on filling in categories, a necessary step for arriving at core categories that are conceptually dense (Strauss & Corbin, 2000). An example illustrates this process. One of the core categories developed from the data was building capital; furthermore, the data suggested that parents built not just one form of capital, but three different forms of it, including social capital, human capital, and material capital. However, while it was relatively clear in the data how parents acquired both social and material capital through the museum program, the process of acquiring human capital and

the forms that it took were much less clear. The researcher found herself asking several questions of this data: Did parents feel they came to know more about science through this program? Was human capital limited to this content area or did it include other content areas? Was parents' feeling that they also learned about their child's learning process part of the human capital they acquired through the program? Through further data collection and analysis, these questions were answered and the category filled in with more detail in order to reach conceptual density.

Generating theoretical propositions. The third key step in grounded theory analysis is the integration of categories in order to arrive at an analytic story. This process involves what is called selective or theoretical coding, or the identification of the relationships and links between categories, as well as the actions and interactions that relate categories. According to Charmaz (2006), "theoretical codes are integrative; they lend form to the focused codes you have collected. These codes may help you tell an analytic story that has coherence. Hence, these codes not only conceptualize how your substantive codes are related, but also move your analytic story in a theoretical direction (p. 63)."

Central to this level of coding is the conceptualization of a descriptive story about the central phenomenon of the study (Strauss & Corbin, 1990). This process involves selecting the core variable from the data; here the core variable emerged early on in the study, as all parents were clearly talking about how the program gave them different ways of being involved, more informal, personal ways of connecting to their children's schooling. Once this core variable of parent engagement was identified from the preliminary categories, it became evident that the remaining categories were the

processes through which the program did that, namely building capital, authoring, and positioning.

Also important at this phase is the linking of categories so that they can be situated relative to the core variable. This was done through the asking of questions about the conditions, circumstances, and context in which the categories occurred. For example, once the researcher started asking parents what they valued about their more informal interactions with teachers, she began to see that these interactions led parents to feel more connected to their child's school in important ways (see the sample memo in Appendix G). This led to more detailed questions in subsequent interviews about how parents valued those interactions and what resulted from them in order to better understand how parents actually activated their social capital and within what context. A matrix was used in order to identify pathways through which the categories connected; this matrix ultimately became Table 4.1 (located at the end of Chapter 4).

In summary, data analysis procedures were guided by two complementary analytic procedures, namely making comparisons and asking questions of the data. "In vivo" concepts were identified in the data through initial coding; these became the building blocks of the analysis process (Strauss & Corbin, 1990). Concepts were categorized using focused coding, and their properties and dimensions fully characterized through further data collection and analysis. Constructs from the Ecologies of Parent Engagement model (Calabrese Barton et al., 2004) were examined against emergent categories, and their fit was determined. Memo-writing was used to establish links between the categories, and thus to generate the theoretical propositions presented in the

next chapter. This final section addresses the verification procedures used throughout the coding process.

Verification Procedures

In quantitative research, it is necessary to be mindful of the importance of internal validity, external validity, and reliability. The corresponding terms in qualitative inquiry are credibility, transferability, and dependability (Lincoln & Guba, 1985); each is accompanied by specific verification procedures that were employed in this study to guard against both reliability and validity threats.

Credibility

Within qualitative research, the notion of credibility is similar to that of internal validity; in essence, it addresses concerns related to the “truth value” of one’s results. Three verification procedures were used to ensure the credibility of this research. First, the researcher spent sufficient time with participants during interviews to check for distortions within their self-reports, a strategy known as prolonged engagement (Lincoln & Guba, 1985). During each interview, the researcher was careful to ask probing questions where a response was unclear, and to clarify seeming contradictions in parents’ responses during any given interview.

Second, the researcher clarified and confirmed emergent categories with study participants during follow-up interviews, ensuring accuracy of interpretations; this strategy is known as member checks (Lincoln & Guba, 1985; Miles & Huberman, 1994; Patton, 1990). Member checks are known to be “the most critical technique for establishing credibility” (Lincoln & Guba, 1985, p. 314). Specifically, follow-up interviews were conducted with three parents upon completion of data collection. During

these interviews (described in the Data Collection Procedures), the researcher shared the study findings, and asked parents to reflect on the degree to which these findings described their experiences in and through the museum program. These parents were highly reflective about the study findings, offering detailed feedback and asking questions to clarify meanings. They all agreed that the findings represented their experiences, although two of the parents wanted the researcher to understand that the construct of positioning did not apply to them, something that was discussed further in order to deepen conceptual understanding of that construct in this context.

As a third form of verification, the researcher engaged in a constant and continuous process of making comparisons between emerging categories and data just collected; this aspect of grounded theory methodology ensures that working hypotheses are revised as more data becomes available and that the researcher actively explores alternative explanations within the data (Strauss & Corbin, 1990).

Transferability

The notion of transferability is comparable to that of external validity, and emphasizes the fact that findings need to be transferable between the researcher and those being studied. In other words, the findings need to be communicated in such a way that readers of the study can fully understand the experiences of participants. Transferability was accomplished in this study through “thick description” (Geertz, 1983), or description that incorporates multiple voices of a relatively small number of subjects, and produces for the reader the feeling that they experienced the events described within the context of that specific setting: “...to thickly describe social action is actually to begin to interpret it

by recording the circumstances, meanings, intentions, strategies, motivations, and so on that characterize a particular episode (Schwandt, 2007, p. 296).

Dependability

Similar to the notion of reliability within quantitative research, dependability refers to the replicability of the study under similar circumstances. The qualitative researcher accomplishes consistency by coding the raw data in ways so that another person could understand the themes and arrive at similar conclusions. Two verification procedures were used to guard against inconsistency. First, the researcher used a qualitative software program, called HyperResearch, to track the process of coding, from initial concepts to preliminary categories to core categories. At the same time, the researcher engaged in memo-writing to document the development of categories and how they changed or took shape throughout the study. Together, these two mechanisms enhanced the likelihood that another person could replicate the same analytic procedures.

Second, the researcher engaged in a peer review process (Lincoln & Guba, 1985; Miles & Huberman, 1994), asking an external researcher who had not been involved in the study to periodically review materials and pose difficult questions about methods, meanings, and interpretations arising within the analysis process. Specifically, this peer review process was used at three points during data analysis. At the outset of the study, the external researcher reviewed a sample of concepts identified from the data, and their corresponding interview data, in order to check and challenge this process. Here, it was helpful to have the external researcher direct attention towards concepts that seemingly were already clustering together in similar ways. As categories were being developed, the external researcher reviewed preliminary categories, as well as the concepts grouped into

the category, again in order to check the process. Finally, the external researcher took part in a process whereby the Ecologies of Parent Engagement (Calabrese Barton et al., 2004) constructs were examined against the categories in the data, clarifying that she too could see their fit. In this way, there were multiple check points on the coding process and the categories which resulted.

Summary

Using qualitative methods within a grounded theory approach, this study sought to generate theoretical propositions elucidating the mechanisms through which participation in a museum program gave parents opportunities to engage in their child's schooling. In-depth, semi-structured interviews were conducted with 20 parents via telephone; follow-up interviews were conducted with 3 of these parents to conduct a member check on the overall theoretical propositions. Data were analyzed using grounded theory procedures, first identifying concepts within the data, then generating more abstract categories, and then linking those categories through theoretical coding. Through the iterative and evolving process of making comparisons and asking questions, three core categories emerged that fit with parents' descriptions of their involvement in their children's schooling. Memo-writing served as a critical strategy for documenting theoretical relationships between these categories, and checking their fit against constructs from the Ecologies of Parent Engagement model. Multiple verification strategies were employed to ensure the reliability and validity of the results, including peer review of the coding process at three critical points as well as member checks with parents. The next chapter presents findings from the analysis of parent data.

Chapter Four: Findings

Overview

Most of the research on parent involvement focuses on clarifying the links between involvement and children's achievement. Not enough is understood about the actual processes of parent involvement – why parents become involved, how they connect with their children's schooling, and strategies for extending their involvement. This chapter presents findings from a grounded theory study designed to develop theoretical propositions about the nature of parent involvement in low-income, urban communities, and specifically the mechanisms through which a museum program can facilitate parent involvement.

The chapter contains four parts. Part One is an overview of parents' perceptions of the museum program, and more specifically the nature of their program reflections. This data sets the stage for the following sections, providing background information on why parents initially participated in the program, what they remembered about it, and how they reflected on their program experiences. Part Two describes results from grounded theory analysis of parent data. A two-part story is told through a series of empirically-derived, theoretical propositions. At a macro level, findings show that the museum program engaged parents in informal, personal ways that were different from the ways they were already involved in their children's schooling. At the core of the analysis is the phenomenon of parent engagement – as opposed to involvement – that emphasizes the relationships parents built relative to their children's schooling, and the contextual nature of their engagement. At a micro level, theoretical propositions detail the mechanisms through which the museum program facilitated engagement, including

building capital, authoring, and positioning, in keeping with constructs from the EPE model. Part Three presents the resulting model, an adapted version of the EPE model but with several significant revisions based on the data collected from this study. Finally, Part Four offers case studies of three specific parents. The purpose of these stories is to present a more holistic, interactional view of the pathways through the model, showing how the processes of building capital and authoring were integrated.

Parents' Program Reflections

During interviews, parents were asked to reflect upon their experiences in the *Parent Partners in School Science* museum program, and to think about how the program may have influenced their involvement in their children's schooling. For all of them, it had been a minimum of two years since they had participated in the program. Analysis of the interview data revealed several relevant trends for understanding these parents, their existing involvement patterns, and their perceptions of the museum program itself.

First, parents reflected on the fact that even before they began participating in the museum program, they considered themselves to be involved in their children's schooling. They identified themselves as key facilitators of their children's development, and understood that they had a valuable role to play in supporting and extending what their children learned at school. Parents described multiple ways in which they were already involved in their children's schooling prior to the program, including helping children with homework, attending school functions such as Back-to-School Night, Reading Night, or Math Night, reading with their children at home, and for several parents, actually volunteering at their child's school, either in the classroom or as part of the Home and School Association. They also acknowledged the developmental

implications of now having older children, children who were more independent and did not always want as much help with their school work as when they were younger. Many of them admitted that they were less involved now that their children were middle school or high school aged.

Second, parents in this study clearly remembered the museum program, and were able to recall specific details of their participation even two years after the program had ended. This was an issue to which the researcher paid careful attention, since a major threat to reflective interviews such as these is that participants do not remember well enough the context surrounding the questions of interest, and may tend to exaggerate or “fill in” where they cannot remember. As each interview was conducted, the researcher probed parents’ memories of the program. Only one mother struggled and ultimately was unable to recall anything specific beyond just going to The Franklin Institute Science Museum. The rest of the parents demonstrated relatively intact albeit discrete program memories. They did not always recall the name of the program, often referring to it only generally or by a slightly different name (i.e., Parent Partners Plus), but they were able to isolate it from other programs at their children’s school, and they described particular activities or events in which they and their children had participated. Many of them also recalled details surrounding their participation such as how they or their children felt about a particular activity. The following memory from a father who participated in the program with his now 11 year old son was typical of the clarity of most parents when they talked about the program:

“I remember the different little projects that my son brought home, dealing with different scientific things. One of them was put a hole in an index card and...I put one outside and I put one inside and then over a 24-hour period we saw what

stuck to it, inside and outside, and then compared them. I thought that was pretty cool.” (T9, p1)

Third, parents reflected on their original motivations for participating in the museum program. They typically referred to the value of the program not for themselves, but for their children. They felt it was a fun, hands-on way for their children to learn about science, something that they implied was important to them. Many parents emphasized that the program offered their children an opportunity to learn beyond the science classroom or textbook. Parents used phrases like “real world science” and “more than just the textbook” to clarify what was valuable about the program for their children. This suggests an acknowledgement on the part of these parents that children need and can benefit from learning opportunities that extend beyond school. Parents also valued the fact that the program gave them something to do with their children that was both educational and fun: “I think that was my favorite part, just being with my kids and having fun at the same time and they’re learning” (T3, p6).

Because parents typically thought about the program and its value relative to their children, they sometimes had to be pressed in interviews to think about the ways the program benefitted them, as parents. Once parents thought about the program relative to themselves, they were fairly reflective about what it meant to them. But the fact that this required probing indicates that parents may not have thought of this museum program as a parent involvement program, but rather as a program targeted to them and their children or a program targeted to them through their children.

Finally, parents were almost entirely positive in their reflections of the museum program. Despite repeated attempts on the part of the researcher to uncover aspects of the

program that parents did not like or did not work for them, there was no evidence of this in parents' interviews. The positive nature of the data may have been due in part to the fact that parents saw the researcher as representing the program and/or the museum somehow. It may also have been a function of the time that had passed since their participation. However, it is worth noting that several parents asked the researcher why the program had ended at their child's school, and what they might do to reinstate it. One mother wrote the researcher a thank you note after the interview, saying how much the program had meant to her and her family.

Parents' positive reflections on the program raise questions about the potential for social desirability or satisficing within their interviews. The researcher paid careful attention to this issue as well, recognizing it as a possible threat to the results. There was no evidence to suggest that parents were trying to please the researcher with their interview responses. In fact, many parents answered "no" to various questions, clarifying in what ways the program had impacted them and in what ways it had not. In a related vein, many parents also qualified their responses, making it clear that when they said "yes" the program had made a difference in some way, the difference was often subtle rather than life-altering.

On the whole, parents in this study were fairly involved in their children's schooling, even before the program. They participated in the museum program because they perceived that it offered an important educational opportunity for their children, and they reflected on their program experiences in ways that suggested relatively intact memories of the events and activities. Discussion now turns from the nature of parents'

overall reflections to the specific theoretical propositions that emerged from the data in answer to the primary research question.

How the Museum Program Facilitated Parent Involvement

Parent interview data were analyzed using a process of grounded theory development (Charmaz, 2000; Glaser & Strauss, 1967; Strauss & Corbin, 1990) with the creation of core categories occurring in an iterative, comparative fashion. The goal of this analysis was to generate theoretical propositions that would describe in detail the nature of parent involvement amongst low-income, urban parents, and more specifically the mechanisms through which the museum program studied here facilitated that involvement.

Findings revealed a two-part story. At a macro level, analysis showed that the museum program engaged parents in informal, personal ways that were different from the ways they were already involved in their children's schooling. At the core of the analysis is the phenomenon of parent engagement – as opposed to involvement – that emphasizes the relationships parents built relative to their children's schooling, and the contextual nature of their resulting engagement, similar to the Ecologies of Parent Engagement model (Calabrese Barton et al., 2004).

At a micro level, three categories detail the mechanisms through which the museum program facilitated engagement. The goal here was not to create categories from scratch, but rather to ground the analysis in parents' language and experiences while at the same time drawing upon existing concepts in the literature. After careful, iterative analysis using grounded theory techniques and procedures (see Chapter 3), three core categories were determined to best describe the mechanisms through which the museum

program facilitated parent engagement – building capital, authoring, and positioning. These categories were drawn from the Ecologies of Parent Engagement model (Calabrese Barton et al., 2004), which puts forth that parent involvement must be understood in situ, as a contextual process that involves the mediation of capital and space relative to other individuals. Throughout this part of the chapter, as these categories are discussed, their theoretical fit is explained and justified; alternative interpretations and concepts are offered and then replaced in order to bolster the study’s findings and to show why parent involvement is best defined from a sociocultural point of view, in terms of engagement.

Within each of the three categories identified, theoretical propositions articulate the various forms that these processes took. For instance, building capital included social, human, and material capital, while authoring included increased presence within school life, new strategies for engaging with children at home, and out-of-school activities for parent/child interaction during discretionary time. Again these subcategories were informed by the Ecologies of Parent Engagement model. Analysis at this level also identified specific components or features of the museum program that parents attributed to that particular process – for instance, parents mostly attributed their acquisition of human capital to the home-based activities within the program. In this way, the three core categories (and their subcategories) were linked to particular program components through parent data.

This part of the chapter is organized first according to the three core categories – building capital, authoring, and positioning – and then according to the theoretical propositions presented within each category. As each proposition is discussed, the core phenomenon of parent engagement is used as the conceptual “glue” that integrates them,

and an argument is made for how these data support Calabrese Barton et al.'s (2004) sociocultural framing of parent engagement and how the museum program provided parents with additional ways of engaging in their children's schooling, ways that were more informal, personal, and contextual than their existing forms of involvement.

Building Capital

The Ecologies of Parent Engagement model puts forth that parent engagement is the mediation between space and capital by parents in relation to others in the school setting (Calabrese Barton et al., 2004). More specifically, engagement occurs when parents activate capital within a particular context in order to create places for themselves within their children's schooling. Taking this view of parent engagement, the notion of capital becomes paramount; it serves as a fundamental building block for parental engagement. Calabrese Barton et al. frame capital by drawing upon Bourdieu's (1986) definitions, where capital "can be thought of as the human, social, and material resources one has access to and can activate for their own desired purposes" (Calabrese Barton et al., 2004, p. 5).

For parents in this study, one of the key roles that the museum program played was to enhance their capital relative to their children's schooling. At first thought, this finding may seem simplistic and obvious. Of course participation in a well-designed parent involvement program should result in parents having additional resources at their disposal. However, not enough is known in the existing literature about how exactly parents acquire these resources, what forms these resources take, and the value of these resources for parents. The Ecologies of Parent Engagement model, for example, clearly states that parents activate capital in order to engage in their children's schooling, but it

does little to clarify how parents come to possess this capital. Data from this study provide much-needed insight into this process within the context of a museum program.

What is more, data from this study show that even for parents who are fairly well educated – most in this sample had a college degree at least, although they lived in low-income neighborhoods – the resources they possess for engaging in their children’s education can be limited. What the museum program did for these parents was to deepen their current capital relative to their children’s schooling; this was true for all parents, not just those with minimal formal education. In fact, through their participation in the museum program, parents acquired not just one form of capital, but typically multiple forms of capital, including social, human, and material resources (see Table 4.1 at the end of the chapter for a detailed summary of the types of capital acquired by each parent). The following three theoretical propositions specify the role that the museum program played in providing parents with the necessary building blocks for engaging in their children’s schooling.

Proposition 1: Parents built social capital through informal interactions with teachers and other parents. Bourdieu (1986) defines social capital as

“the aggregate of the actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of a mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectivity-owned capital, a ‘credential’ that entitles them to credit in the various senses of the word” (Bourdieu, 1986, p. 102-103).

In the context of this study, social capital referred to increased access to the formal school system and its functions through social interactions with teachers that were more personal and informal in nature, and that began to break down the structural hierarchy between

teachers and parents. In short, parents gained access to teachers and interacted with them in ways they had not before their program participation.

Parents admitted that typically their interactions with their child's teacher, the science teacher in particular, were limited to formal, school-defined forums – like parent-teacher conferences – that honored the hierarchy between teachers and parents, and put teachers squarely in control of the conversation. The museum program gave these parents additional and alternative forums for conversation with the teacher, forums that were more “informal” or “casual” in nature. While parents and teachers were digging side-by-side in the school's garden, parents had a chance to talk to teachers in a more “relaxed way.” While parents and teachers were doing science activities at the museum together, parents had a chance to “see the teacher in a different light” and get to know her “on a more personal level.” During these events, parents saw teachers wearing jeans, and sometimes with their own children in tow. They had an opportunity to get to know teachers “as people.” All of these things contributed to breaking down the traditional roles that teachers and parents typically assume within the formal education system, instead putting them on more equal footing. One mother with a 16 year old daughter and twin sons 14 years explained,

“I wouldn't say you're friends with the teacher, but you're - their guard is more down, where they're more relaxed when they talk to you. So you get - you can talk and get a more honest answer or they know that they can tell you there's a certain type of problem or something that's going on. Or even something positive that they can tell you. And you're not gonna turn and blame it on them.” (T2; p21)

As illustrated in this quote, many parents felt that these informal interactions with teachers provided them with access to a different type of information about their child.

For the most part, formalized mechanisms for teacher-parent conversations tended to

happen when there was a problem or an issue that needed resolving. Parents appreciated the opportunity to talk with the teacher outside of these circumstances, and perhaps focus on more positive aspects of their children's learning. They also appreciated opportunities to build trust with teachers, as evidenced in the parent's comment above about teachers not feeling that "you're gonna turn and blame it on them."

In a similar vein, parents came to feel more comfortable asking questions of the teacher. The program gave them a context in which it became "more acceptable" and less threatening for the parent to ask questions. Oftentimes this was simply because the events and activities were designed by museum staff, and not by the teachers; this made parents feel they could more readily ask questions about the content without potentially offending the teachers. It also gave parents and teachers a common experience which they could draw from in their conversations, a more personal experience. In the words of one father with an 11 year old son and an 8 year old daughter,

"Well, if I had questions about, you know, what - what the reasoning was for one of those cards - what the reasoning was, and I could go up and talk to the teacher and just say, 'Listen, you know, I'm just seeing something here, but could you explain why we're doing this?' Or I could ask why they're doing it this way and not another way. And, you know, you get to learn how the teacher thinks, how they - go about teaching the children, you know." (T9; p10)

Social capital also took the form of intentions or desires for future behavior. Even after the program had ended, some parents in the study said they continued to interact differently with their children's teachers. The quote below is from the same father above, explaining how he now felt that he had a greater desire to understand the background and motivations of his child's teacher:

“Because I think we’re more involved now with the teachers, and finding out their personalities and, you know, who they are. We try to find out, you know, who they are outside of the classroom, meet them on like a - well, inside the school, but like more on a social basis, you know what I mean?” (T9; p10)

In addition to influencing their interactions with teachers, parents also felt that the museum program provided opportunities for them to connect with other parents at their child’s school. As was the case with teachers, the program gave parents a common experience through which to get to know and talk to other parents. For example, one mother with two sons aged 15 and 11 years admitted that she never liked science as a child and constantly struggled with the subject throughout her schooling. For her, the activities in the museum program helped her to build both human capital, in the form of increased interest, comfort and knowledge of science, as well as social capital, in the form of increased connections with parents around this shift in her relationship with science. The museum program gave her a common experience through which to get to know other parents, and to realize that she was not alone in how she felt about the subject:

“You know, if I would see parents they would say, ‘Oh, did you do that experiment yesterday with, you know, what did you think about that?’ And we would talk about it as we were waiting for our children, as we’re dropping them off for school in the morning...and I was like, ‘No, I didn’t like science. But I can tell you I enjoy this way of doing it because it helps us both.’ And other parents were like, ‘I felt the same way but I thought it was just me.’ But there are other parents that feel like that.” (T17; p18)

In addition, parents reported that their conversations with other parents at their child’s school made them feel part of a larger group, and gave them others to talk to about issues or problems. In the words of a mother with a 10 year old daughter,

“I mean, I’ve actually become friends with quite a few parents just because of just being involved in the program. People that I normally would have just said, ‘Oh, hi,’ at school, you know, in the schoolyard, we were actually working together and talking about the different programs...it’s just you feel like you’re part of something then, you know, it’s also like a sounding board, like, if you do have a

problem, your child may not be doing too well in this area you can talk to another parent and feel a little bit better about it.” (T20; p5/6)

As seen in the quote above, parents in this study often referred to potential problems or issues within the school when talking about their museum program experience.

Sometimes parents described the potential problem at hand; for instance, one parent shared that her daughter had been bullied at school and that she felt the principal had not taken the issue seriously enough. Other times, parents simply referred to the idea that there problems, and even when asked to elaborate, could not or did not want to provide a specific example. Rather, these parents seemed to be alluding to the fact that problems often exist within the school environment, and that the museum program sometimes gave them resources or strategies for addressing potential problems.

Whether it was with other parents at their child’s school, or teaching staff at their child’s school, parents in this study reported the building of social capital through their participation in the museum program. At program events, teachers became more accessible and approachable, and interactions with teachers were more informal and relaxed. Home-based activities gave parents a common experience base with which to converse with teachers, a chance to talk with them about something other than their child’s progress or behavior in the classroom. In addition, shared program experiences gave parents opportunities to connect with other parents at the school. Through conversations with parents they realized they were not alone in the issues they faced relative to involvement in their child’s schooling.

Proposition 2: Parents built human capital through program events and activities that engaged parents and children together. Human capital is most often defined in terms of the knowledge a parent possesses (Diamond & Gomez, 2004). This concept draws upon Bourdieu's (1986) notion of cultural capital, defined as forms of knowledge, skills, and education possessed by a person, or referring to the cultural norms prevalent within a community.

Through the museum program, parents increased their knowledge of science. Although they did not provide specific examples of what they had learned, they made it clear that the home-based activities provided opportunities not just for their child to learn about science, but for them to learn about it too. In fact, some parents implied that was what made the activities appealing for them, saying things like "It made me also learn with them" (T12, p11) and "It was a learning experience for myself as a parent as well...I knew I was going to learn something from the project" (T17, p6/12).

Perhaps more than acquiring concrete knowledge of the subject matter, the program helped parents to feel more comfortable engaging in science with their children; it gave them an access point to a content area that at worst they had avoided and at best they had only begrudgingly helped their child with. Parents admitted that they did not enjoy science in school themselves, and that they had not had "good" science experiences as children. They valued science learning for their own children, but typically relied on others to facilitate it since they simply did not feel qualified, especially the older their children got. This suggests that what the museum program did was provide an opportunity not just for parents to learn about science themselves, but equally important to feel capable of facilitating their children's science learning.

For example, the experience of one mother with two sons aged 15 and 11 years is representative of many parents in the sample. She admitted that she never liked science growing up, but that through the museum program's home-based activities, she was required to engage in experimentation with her child (the activities were designed such that they required both an adult and child for completion). Although at first she held minor resentment at having to play a role in these activities, she gradually came to feel more comfortable with the subject as a result:

“Because it's something that I really...I dread all the time. We do math. We do spelling. We do history. We do everything, and then science is like ‘Oh god, we've got a science fair project?’ It wasn't really something that I was like, ‘Yay, we've got a science fair project!’ I used to throw it on my husband and said, ‘You do the research and let me create it, create the project.’” (T17; p6)

For this mother, and for other parents as well, the museum program played a role in reframing her relationship with science. When she first started the program, the notion of facilitating her child's science learning was not part of her parent identity. She readily admitted that she took full responsibility for helping her children with all of their homework except when it came to science; she made her husband take on that task. What the museum program did for her, and for other parents, was to help her to see herself differently, to feel comfortable with science and thus to see herself as a parent who could play a valuable role in her child's science learning.

Some parents not only began to feel more comfortable with science, but felt they had developed skills and resources for facilitating their children's science learning. These parents talked about doing the Exploration Cards multiple times, even after the initial “assignment” was completed. One mother said she first did the activities with her older daughter, and then did them again with her younger children once she felt better able to

facilitate the activities. Another mother remembered feeling that the activities helped her to see how she could replicate similar activities at home using materials found around the house. In addition, this mother implied that the program simply helped her to see the value of hands-on experimentation for children, something that she felt the school did not do enough of and that she later raised as a point of concern with her children's teacher:

“...it made me realize this stuff was simple and it didn't cost much money. Just like counting beans and counting cars and stuff like that [two activities that were part of the museum program]. You could sit there and make a simple project out of very little, and it's not that expensive so you can't say - you didn't say, 'Oh, it's so expensive that we can't do this program no more.' It just takes - it just takes a simple - when kids see a science project they learn more from it by doing it then they do just sitting there and saying, 'Oh, this happens and that happens.'”
(T4; p8)

Not only did parents increase their knowledge of and comfort with science, but they also enhanced their knowledge of their children's interest in science, and knowledge of how their children learned and acquired information relative to science. Although this knowledge of children's attitudes and learning processes is not typically thought of as human capital, this study argues that it should be, and that this form of human capital is an important building block for parent engagement. By broadening the definition of human capital to include not just knowledge of content, but also knowledge of what children are interested in and how they learn and acquire information, it helps us to better see the potential value of a museum program in building capital; it does not just help parents to learn about content, but it also helps them to learn about their children and how they learn best. A similar argument has been made recently by Brophy (2008), who advocates for an increased emphasis on not just what students are learning at school, but helping them to value what they are learning in school.

For example, one mother with three children including a 14-year-old son who participated in the museum program, talked about doing the home-based activities with all of her children, and realizing just how interested they were in the subject:

“Like I never knew they liked science like that until we started doing the projects and stuff. I seen that they were interested and yeah - cause I would have never thought like- science is like- it wasn't important to me before, with them. It was just like, ‘Okay, let's get your math, your reading, and all that stuff together.’ It just opened my eyes to the different things that they like to do, like that.”(T7; p5)

A mother with a 12-year-old daughter explained how her program participation gave her a window into her daughter's learning process more generally:

“...it helps you interact with your child more and see how they view things differently than you do. It helps you see how your child views the work. With Parent Partners in Science, because they had to have their participation end of it too, it wasn't just all the parent part, you see how the little workings in their mind go and see how they view - and there's times where he's figured out problems, and I didn't even see it in that way.” (T5; p7)

Whether it was nontraditional or traditional forms of capital, the museum program gave parents access to additional resources relative to their children's science learning. Through home-based experiments that parents and children had to complete together, parents came to feel more comfortable with science and came to better understand their child's science interests and learning processes.

Proposition 3: Parents acquired material capital through free museum memberships. Material capital refers primarily to the economic resources that one has access to and can activate for their own desired purposes (Bourdieu, 1977). In the case of the museum program studied here, parents were given a free, year-long membership to The Franklin Institute Science Museum during at least 3 years of the program. All of the parents interviewed reported using the free membership; many parents clearly said that without the

membership, they could not have afforded multiple visits to the museum since the cost would have been prohibitive. In the words of one mother with two sons 9 and 10 years,

“I wouldn’t have been able to afford to go The Franklin Institute as much as we did if it hadn’t been a part of the membership. That helped a lot and they really enjoyed going there...It was an outing. It gave us something to do because we’re very poor and I can’t afford to do a lot of stuff.” (T4; p16)

Through the provision of museum membership, the program gave parents material capital in the form of a self-described “family outing,” something that was highly valued by parents who found themselves searching for inexpensive, educational activities for their family on weekends. In reflecting on what the membership meant to them, parents often juxtaposed a museum visit with other weekend activities, implying that its value lay in the fact that it was not only fun and entertaining, but also educational in nature. One mother, with two twin daughters 14 years old, explained,

“It made it so much easier. It also gave me things to do with my kids besides just going shopping for sneakers, stuff like that. It provided me the resources to do things I probably couldn’t have afforded. I wouldn’t have been able to afford going to The Franklin Institute that many times... And also it gave us something to do that was useful on a Saturday morning and after school too.” (T1; p24/25)

Overall, the museum program gave parents access to multiple forms of capital. Social capital was built through interactions with teachers and other parents in the school. Human capital was acquired in the form of not only personal knowledge of and interest in science, but also awareness of their children’s interest in and learning of science. Material capital was afforded through the provision of museum memberships, providing access to the museum. As mentioned at the outset of this section, careful consideration was given during the grounded theory coding process to alternative ways of conceptualizing core categories, in an attempt to

clarify how the data fit with the theoretical concepts from the Ecologies of Parent Engagement model. For example, an alternative interpretation for the notion of social capital as presented here could be based in Hoover-Dempsey's construct of perceptions of invitations (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey et al., 2005). In her psychological model of parent involvement, Hoover-Dempsey argues that three factors motivate parents to become involved in their children's education: 1) parents' motivational beliefs, including their role construction and self-efficacy; 2) invitations to involvement from others, including those from the school in general, teachers, and students; and, 3) parents' life context, including factors such as knowledge, skills, time and family culture.

It is possible to argue that rather than building social capital, what the museum program did for parents was extend an invitation for involvement. Research has shown that such invitations can help parents to feel more welcome and valued within their child's education (Epstein, 1986; Griffith, 1998). However, analysis of interview data in this study suggested that parents were not saying that the program extended to them a social invitation for involvement, but rather that it permitted them to reframe their interactions with teachers in personal ways that broke down traditional hierarchies and gave them access to information about their child. Perhaps more importantly, parents' comments suggested a sense of personal agency in this regard; the emphasis was not on a shift in teacher's attitudes towards them, or a perception that teachers were reaching out to them, but rather a desire on their part to talk to teachers and to be more in control of the conversation. For instance, parents made comments like, "I just began to communicate with them in different ways" (T3, p18) and "I could feel more comfortable

talking with her” (T20, p4). It is for these reasons that this study uses the frame of social capital as opposed to the notion of perceptions of teacher invitations.

In terms of human capital, again it is useful to explore a possible theoretical alternative. The construct of parents’ motivational beliefs, specifically role construction and self-efficacy, could be used to explain parents’ comments in this study (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey et al., 2005). Hoover-Dempsey et al. argue that parent involvement decisions are influenced by parents’ beliefs about how children develop, and their belief in their own abilities to competently facilitate their children’s learning. Certainly, some of what parents were saying is that they came to feel more efficacious about science and about facilitating their children’s science learning. But that was not all that parents were saying. Equally important was the fact that parents gained valuable knowledge about their children’s learning dispositions and processes, something that is more specific than either parental role construction or parental efficacy. Rather, broadening the definition of human capital to include more nontraditional dimensions better encapsulates those knowledge-based resources that parents felt they gained from the museum program. Having established that the museum program gave parents opportunities to build multiple forms of capital, discussion now turns to how parents leveraged this capital within particular contexts in order to create new places for themselves relative to their children’s schooling.

Authoring New Places for Engagement

In the previous section, parent interview data were used to argue that one of the key roles that the museum program played was to give parents necessary resources for engaging in their children’s schooling. It was argued that these resources are best framed as

forms of capital. This section examines what parents did with the capital they acquired, demonstrating that parent engagement is the activation of capital within the constraints of a particular space in order to author new places for involvement. The point of this section is not to demonstrate that the museum program did in fact facilitate parent engagement, but rather to uncover the ways in which this engagement occurred, what it looked like, what it meant to parents, and what it was about the museum program that was most relevant for facilitating parent engagement.

Calabrese Barton et al. (2004) define authoring as one of two key actions that foster parent engagement (the other action, positioning, is discussed in the next section). Specifically, authoring is the activation of the capital available to parents in a given space or context; what results from authoring is the formation of places where parents are able to play a role in their children's schooling in a way that is meaningful to them and fits with their agendas for their children's development.

Defining parent engagement from this perspective has two theoretical implications. First, the Ecologies of Parent Engagement model states that authoring, and the places that result from authoring, cannot be thought of separately from the capital and space which lead to this process. In other words, the "why" and "how" of parent engagement cannot be separated from the "what" of parent engagement. In fact, within this model it is these interconnections between what parents engage in and how they manage to do so that are most important, emphasizing "that what parents "do" in school settings...is an active manifestation of the physical and material boundaries of what it is they want to do" and can do (Calabrese Barton et al., 2004, p. 6).

This notion that parent engagement must be understood in-situ, and that it must be framed holistically within the constraints and affordances of a particular context, is significantly different from other perspectives on parent involvement, and denotes the definitional shift from parent involvement to parent engagement. Most of the current research examining parent involvement assumes that the process through which it occurs is somehow separate from the behaviors that it produces. These studies typically employ one set of measures for why and how parents are engaged – for example, using Hoover-Dempsey’s (1997; 2005) psychological factors – and another set of measures for what parent involvement behaviors result from these processes – for example, using Epstein’s (1986; 2001) School and Family Partnership Scale with 44 items measuring parent involvement at home, formal contact with school staff, at-school involvement, and perceptions of school climate. Throughout this section, parent interview data are used to demonstrate not just the theoretical fit of the concept of authoring, but more broadly the contextual nature of parent engagement and the importance of taking a sociocultural perspective on engagement. In this way, findings in this section are intended to have significant theoretical implications for the reframing of parent involvement, advocating for definitional shift to parent engagement whereby the processes and activities are considered in concert rather than separately.

Second, using the theoretical concept of authoring to describe parent engagement broadens the lens through which parent involvement behaviors or activities are viewed. Typically, these behaviors are defined in highly school-centric ways, focusing on actions such as helping children with homework, volunteering in the child’s classroom, or serving on the Parent Teacher Association at school. However, authoring emphasizes parents’

definitions of engagement activities, and focuses on the ways in which they describe their engagement and what it means to them. It shifts the focus from concrete, school-defined behaviors to more subtle and personal forms of engagement, and stresses that what is equally if not more important than parents' actions are their intentions and desires for their children's development, as well as the way in which they frame their identity relative to their children's schooling.

Specifically, parents' authoring in this study took three different forms, all of which have the nontraditional qualities discussed above: a) "being there," or the notion that parents were able to find ways to monitor, check, or generally feel more comfortable with what was going on at their child's school; b) negotiating new roles, or the notion that parents either became more involved where they were not before or shifted the role that they played in their child's learning at home; and c) having activities to engage in with their children outside of school, or the notion that parents took their children to the Franklin Institute Science Museum (or other museums) in their discretionary time, and came to appreciate the value of such activities for their family. All parents in the study authored, but not all parents exhibited all three forms of authoring (see Table 4. 1 at the end of the chapter).

With these implications in mind, this section now turns to a detailed discussion of the three theoretical propositions related to authoring new places for engaging in children's schooling. As each proposition is described, attention is paid to the theoretical implications mentioned above in order to provide insight into what parent engagement actually looks like, and the role that a museum program can play in helping parents to create new places for engaging in their children's schooling.

Proposition 4: Parents found new ways of being present in their children's school.

Through the museum program, parents activated capital in order to create new opportunities for engaging in their children's schooling. One of the ways they did this was to find new ways of being present in their child's school or school life. Several parents in this study used the phrase "being there" to describe this type of authoring. For example, a father with a 13 year old son said, "It's like working on a job. You can talk about the job all day, but being there...on hand and seeing what's going on, it makes a difference" (T13; p10). The concept of being there is reinforced by research that refers to this same phenomenon as "presence" (Calabrese Barton et al., 2004; Carreon, Drake & Barton, 2005; Jackson & Remillard, 2005). Admittedly, being there or being present stands in stark contrast to typical parent engagement activities most often referred to in the literature – for example, volunteering in the classroom, attending Parent Teacher Association meetings, or helping with fundraising (Epstein, 2001). It is a much more subtle form of engagement, one that is about both actions as well as intentionality relative to children's schooling.

Finding new ways to be present in their children's schooling was a contextually bounded process. It involved the activation of parents' social capital within the school space, as parents tried to find entry points into what was seen as a closed system, a system that was difficult to access unless you were a teacher in the school or were experienced with many of the things that teachers do. Through their informal interactions with teachers, parents found subtle ways to negotiate more personal check points within the school system in order to monitor what was going on at the school, or check what was going on in their child's classroom. Put simply, parents said "I could find out what was going on" (T2; p9)

or “I could take care of the things that I had to do” (T15; p6). One mother with two daughters aged 8 and 11 years explained,

“I want to know what’s expected of them, what they’re graded on. What I can do to keep them involved, and pretty much just to bring it home. ‘If you’re doing this, then I know you’ll like this.’ So just keep them on track. It’s going to keep my kids on track with what they have, what they need, and so that makes me aware and it helps everybody.” (T16; p7/8)

At the classroom level, parents talked about taking subtle actions to monitor their child’s classroom life. One mother who participated in the program with her now 14 year old daughter explained that during the events at the museum, she had a chance to talk with her daughter’s science teacher, to get to know her on a personal level, and to watch her interact with students. In the weeks and months following those events, this mother used that capital to check what her daughter was telling her about what was going on in science class at school:

“...because I would probably get to see the science teacher only at the parent conferences if I want to go see her, and then you get like a 15 minute timeframe, so that’s 3 times a year. Where having the Partners in Science, we went to The Franklin Institute with her, and we went on Saturdays and she was there, and you’d get to see her and how she interacts with the child. So then I know like if something is wrong and my daughter come home telling me all she’s doing is yelling because if this person here is interacting with the children then it’s a different thing when she’s in that classroom and she can’t be yelling the whole time. I think my daughter exaggerated it, and children do.” (T8; p11/12)

Another mother with a 10-year-old daughter explained that the museum program gave her opportunities to talk more with her daughter’s science teacher, outside of the formal parent-teacher report card conferences. She used these conversations to monitor what was going on in the science classroom, and to ask questions about what else she could be doing to help further her daughter’s science learning:

“...you really don’t go to the school that much and really speak to the teachers because it’s more so you’re on the computer and you’re

generating information or questions you may have through the internet. And with the parents being able to come in the classroom and actually participate, I think it's awesome... I talked with the teacher about the different experiments. How often they would have the experiments going on. What can I do to better my child while they're in school? How can I improve better communications without just going through the internet or just having paperwork sent home? Can I call them on the phone and stuff like that?" (T19; p3/4)

Taking the above quote as an example, it is useful to consider alternative interpretations for the concept of authoring, and specifically the concept of increased presence within children's schooling. Is it possible that what parents are doing here is employing generic, content-based strategies for engaging in their children's learning? A careful examination of parents' comments relative to being there in their child's school life reveals that the strategies parents are employing are not generic, but rather embedded within the particular school context. Furthermore, parents are not engaging in their children's science learning, but rather monitoring this learning in customized ways, depending on the needs of their child and the particular variables within their child's classroom. As the one mother said, what the museum program did for her was to give her a way to check what her daughter was telling her about her science teacher – a specific problem related to her child and solved with data she collected through her informal interactions with the teacher. This interpretation points to the contextual nature of parent engagement processes, and the importance of embedded strategies for helping parents to access their child's school system.

Even parents who were already actively volunteering within their child's school found ways to increase their presence there. One mother with three children explained that prior to joining the museum program, she had been volunteering in her daughter's classroom weekly; she continued to volunteer during each year that she participated in

the museum program. For her, the program legitimized her presence in the school, helping her to overcome negative feelings towards the school, and to push past the mixed messages that were sent to her about the degree to which she was welcome there:

“I don’t think I would have been in there as often. I would get feedback from - the principal would see me and she would make comments like, ‘Oh, I guess we should put you on the payroll since you’re here all the time.’ But yet they wanted volunteers. They wanted the parents to volunteer, but if you did, you kind of got snubbed at, which I didn’t understand. So for me to be in there because of the partnership, it was a legitimate reason that I was in there” (T10; p 11)...I’m definitely more involved [now]. I became more aware of what was going on in the school.” (T10; p12/13)

This quote highlights the emotionally-charged atmosphere of the school, and hints at an underlying theme related to parents’ mixed feelings about their child’s school. Many parents offered examples of particular problems – with the science teacher, for instance, who was too focused on the science fair for their liking. It was not that the museum program provided solutions to these problems, but rather that parents were describing the overall environment in which they were trying to engage, and doing so with emotionally-charged language and descriptors, suggesting that parent engagement is perhaps equally an affective process as it is a cognitive one.

Increased presence within the school space did not always take the form of actions such as monitoring or checking. Sometimes it took the form of a subtle reshaping of parents’ relationship to the school. Parents came to feel more comfortable sending their child to the school, or felt more strongly affiliated with the school in some way. Many parents interviewed simply said that their interactions with teachers in the school made them feel better about the school. They saw that the teachers cared about the students, and although they might not agree with every action taken by the teacher, they

could generally see how dedicated the teachers were. This made them feel more connected to the school, and made them feel better about sending their child to the school every day. In the words of one mother, “It makes me feel like I’m a better parent, like I’m on top of my job as a parent” (T7; p5). Another mother with a 10 year old daughter explained that by interacting more with her daughter’s science teacher, and getting to know the teacher more on a personal level, she developed more positive feelings about the school which in turn led her to volunteer in her daughter’s classroom:

“Well, I think you just feel more comfortable, as a parent, sending your child to school, that you know the person, they're good people, they genuinely care about your child and their education. It just gives you better feeling, you know what I mean? I just, you know, rather than, you know, sending your child to school and, basically, just treating that person as a stranger, you know, it's almost like a marriage when you think about it. You know, when you and your husband are communicating better and things are going well then the whole family is working better as a whole. That's kind of like how it is with [the school].” (T20; p5/6)

This finding points to the fact that a fundamental aspect of parent engagement is not only the activities in which parents engage, but the values, beliefs, and attitudes that inform and define those activities. In other words, parent engagement is not just about volunteering in a child’s classroom. It is also about how parents feel about the child’s classroom, and what that means for how they see themselves as parents.

In summary, it has been argued in this section that a key form of authoring is increased presence within a school or within a child’s school life. For parents in this study, being there was accomplished through the activation of the social capital they had built through the museum program. What is more, this parent engagement process was bounded by the school context, and mediated by the constraints within that setting, namely the issues or problems that some parents had with their child’s school, and the negative feelings that sometimes resulted.

Being there allowed parents to check what was going on at school and to better understand how things worked at the school and in the classroom in ways that made them feel more connected to and empowered within their child's learning. Being there also included more subtle and personal dispositions related to parent identity, for instance, feeling better about the school, feeling a stronger affiliation with the school, and thus feeling like a better parent for sending a child to that school.

Proposition 5: Parents negotiated new roles for themselves in their children's science learning at home. Another way that parents engaged in their children's schooling was to either "do more science at home" or "play a different role" in their children's science learning at home. By way of background, most parents admitted that while they characterized themselves as involved – helping their children with homework, reading to them, attending important events at their school – they were not always involved in their children's science learning before participating in the museum program. One parent explained that there are few opportunities for such engagement in the school itself: "It's not like you're going in and helping them do a science experiment" (T16, p8). Most parents confessed to feeling intimidated by the subject matter, and perceived themselves to be ill-qualified to help their children in this area, as was discussed previously in the section on human capital.

Through the museum program, parents came to feel more knowledgeable about science, more comfortable with the subject matter, and more knowledgeable about their children's learning of science as well. They leveraged this human capital to find new or different ways of engaging in science with their children at home. As was the case when parents found opportunities to increase their presence within the school (Proposition 4),

negotiating new roles within children's learning at home was a contextual process, involving the activation of human capital within the home environment. This bounded nature of authoring again provides evidence to support the fact that parent engagement needs to be understood in situ, and that the processes cannot be separated from the actual activities in which parents engage.

For some parents, authoring a new home-based place for engagement simply meant being involved in their child's science learning where they were not before. For instance, one mother who participated in the program with her now 14 year old son explained that the museum program helped her to see how interested her son was in science, which prompted her to "pay more attention" to his science learning. She bought science books with activities similar to those they did in the program, and tried to engage all three of her children in science at home. She also started to shift the role that she played in their science learning at home, not only providing them with learning opportunities, but actually engaging *with* them:

"I probably wouldn't have sat there and watched the Discovery Channel with them. I probably would have been like, 'Okay, you can go there and watch it' or 'Sit here and watch this.' But going through that [program], now it's like, 'Okay, I'll sit here and watch it with you.'" (T7; p7)

For some parents, the museum program gave them a different role to play relative to their child's learning. The collaborative model of the Exploration Cards (activities were structured such that they required a child and an adult working together) carried over to the ways in which they worked with their child on other homework assignments. Parents became homework facilitators, rather than homework checkers or supervisors, trying to identify how best their child could succeed in the task and playing whatever role they

perceived was most beneficial. Again, this seems to have much to do with shifting parent identity; by drawing upon human capital, parents came to see themselves in a different role relative to their children's learning, one that was more responsive to their children's learning needs. For instance, one mother with a 12 year old son said she felt the museum program gave her a window through which to view her son's process for solving problems. Equipped with this knowledge, she began to take on a different role when working with him on homework assignments:

“I think...as a parent you just get in there and you just want to work out the problem and basically do it for them. You just can't help yourself because I think a lot of parents are like that. 'Well, this is the problem' rather than, 'Let me see how he put the problem together.' Like even if it was like a beanbag toss or something like that. Just back off and let him put it together and show me how to do the project, how it works. Instead of me saying, 'Well, those are the directions. We're going to do it this way. Your turn.' So yeah, I think it did...I've got to keep in mind to step back a little and not just want to take over the whole project and do it for him.” (T5; p15)

A father who participated in the program with his now 11 year old son described a similar strategy. For him, the program helped him to see not that he should back off, but rather that he could be more than just a homework checker, and actually play a collaborative and supportive role in the process, shifting his identity relative to the role he played within his son's homework:

“... I think PPSS pushed me into having more of a hands-on role with his education, instead of like the past, 'Yeah, your homework's done, okay.' Sign it off and that's it - I think PPSS opened up my mind to basically just sitting down with my son and saying, 'Alright, here's what we gotta do. How do you think we should do it? Before that, it was 'Alright, you got your directions here, do it. If you have a question, ask me and I'll show ya.'” (T9; p14/15)

In summary, parents in this study activated human capital in order to redefine the roles they played relative to their children's science learning at home. Through active participation in the program's home-based activities, parents came to feel more

knowledgeable and comfortable with science, and to better understand their children's science interests and learning processes. They leveraged this capital to negotiate new roles for engaging with their children at home. For some this meant actually facilitating science learning for their children where they had not before; for others, it meant redefining the roles they had previously played to find new ways of facilitating science learning, ways that were more responsive to what they now knew about their children's interests or learning needs.

Proposition 6: Parents used the museum as a forum for engaging in parent-child interaction outside of school. Through the museum program, parents acquired material capital in the form of financial and physical access to The Franklin Institute Science Museum. Each participating family was given an annual membership to the museum which allowed their family to visit anytime during the year for free. According to parents, this material capital gave them a physical place outside of home and school in which to engage with their children in their discretionary time. One parent, a single mother at the time she was participating in the program, has twin girls who are now 14 years old. She explained that the program gave her another venue through which she could interact with her girls, and described the importance of that venue in terms of how it shifted the dynamic of their interactions:

“It gave me a chance to do the stuff that I wish I could do with them on my own, but I couldn't...it's just taking them out of the home situation and you're in a different environment so there isn't going to be any snipping and snapping and fighting and bad behavior. Do you know what I'm saying? Like it gave you a chance to be with them and have fun without having to like...kind of like always like having to be the bad mom all the time, do you know what I mean? Like with the discipline and all that. It made a nice environment to be a parent, and make it easier for a parent to be with their kids because it's so hard sometimes when you take them places...” (T1; p25)

In talking about what it meant to her to take her children to the museum, this mother clearly refers to an emotional aspect of parenting, and the challenges associated with children's behavior in various settings. For her, the context of the museum program helped to temporarily alleviate these negative behaviors from her children, something she really valued at the time.

Another mother who participated in the program with a now 14-year-old son said that going to the museum gave them something to do together as a family; she added that while they valued the museum membership, they still would have gone to The Franklin Institute even without it:

“It’s just something different. Something different than ‘Okay, let’s go to the zoo, let’s go to Dave and Buster’s’ or something. Instead, we can be like, ‘Okay, let’s go to a museum. Let’s see what we can learn today.’ You know, different.”
(T7; p7)

A mother with a 10-year-old daughter explained that going to the museum helped her to find additional community resources for her daughter's science learning:

“It gave me a springboard I guess of where, what things to look for with my daughter because I got her involved in different aspects of the science. The science fair got us into other science classes where she wanted to try new things with the science. We signed up, or we did a few of the other classes that the Franklin Institute offered, and we made sure we went there when they were doing special activities, and they got to do the hands-on classes, make paper, fly the different airplanes. So we went on specific days to go and do specific activities, so we made sure we kept a calendar for those things. We also got involved in the Academy of Natural Sciences, which holds things as well with the science and hands-on so they enjoyed that as well. So it was like a springboard from there that we got to look into other classes cause I didn’t know there was that much out there for the classes...” (T19; p3/4)

This section has focused on authoring as a key action that fostered parent engagement, and presented three different forms of authoring facilitated by the museum program studied here. The goal was not to demonstrate the program's impact on parents,

but rather to use the context of the museum program to better understand the nature of parent engagement, what results from it, and what it means to parents. Parent data in this study revealed several key dimensions of the parent engagement process as it occurs within the context of a museum program: 1) parents engage in very personal ways in their children's education by authoring informal places at school, home, and in the community in order to more closely integrate into their children's schooling; 2) the reframing of parent identity is an important aspect of parent engagement as facilitated within a museum context; 3) parent engagement is highly contextual, and involves the activation of specific forms of capital as mediated by the values and constraints of a particular context; and 4) parent engagement is best considered holistically, such that the "how" and "why" of engagement are examined in conjunction with and the "what" of engagement (as opposed to separating process from behavior). The chapter now turns to a discussion of the third core category, positioning.

Positioning for Influence

As articulated earlier, the Ecologies of Parent Engagement model posits two key actions through which parent engagement occurs, namely authoring and positioning. The previous section argued that authoring is an important mechanism through which parent engagement occurs, and that it involves forging personal and informal places through which parents can connect to their children's schooling. This section addresses the process of positioning.

Calabrese Barton et al. (2004) define positioning as using the place that one has authored to influence others relative to their child's schooling. There was little evidence of positioning within the data in this study (Table 4.1 at the end of the chapter shows that 4 of

20 parents demonstrated positioning). It is for that reason that there are no theoretical propositions about positioning stated here. Rather, the trends that emerged around positioning for those few parents are discussed with the acknowledgement that this process did permeate the interviews enough to be raised to a theoretical concept.

For those parents who did position, the process centered around their child's teacher. Parents used their presence in the school, or their engagement in their child's science homework, to advocate for their child's learning or to try to change something within the school or classroom in order to improve the conditions surrounding their child's learning. For instance, one mother who participated in the program with her now 14-year-old son explained that through the home-based activities they did together, she came to see that he liked science. She started to pay more attention to his science homework and to talk with him about what he was doing in science class at school. She realized that while her son really enjoyed the home-based science activities they did as part of the program, he did not seem to enjoy science at school. Hypothesizing that it was the experimental, discovery aspect of the program's activities that engaged him, she decided to talk with his teacher in an effort to encourage more hands-on, experiments in the classroom, a strategy that she felt would benefit her son. As evidenced in her comments below, this mother was clearly displeased with how science was taught at school, and was in large part responding to those negative feelings in her advocacy:

“Now I go to and talk to the teacher about - I'll say, ‘What are they learning?’ You know, like, ‘What's your curriculum? What's your study guide?’ I can follow up on that and by asking her that, then she'll like - it made her have to do - cause she was just like doing book work, and they wanted to do science projects and you get all the stuff there for science, and you're not using it because you say some of the kids don't behave, but you can't make all the kids suffer for the kids that don't.”
(T7; p9/10)

Another mother with two sons aged 11 and 15 years also began to ask questions of the science teacher through her participation in the museum program. At her son's school, the Exploration Cards were sent home as homework assignments, and were graded by the teacher. She had questions about how the assignments were graded, arguing that if the goal was for parents and children to collaborate together, then how could the child receive a grade for the parent portion of the activity? She pushed the teacher to articulate her grading criteria, and used that to more closely align what they did together at home with the activities and what the teacher did in class with them:

“...I wanted to know what did we do at home that was different from what she did in school. And she would tell me if there was something different: ‘Well, I was looking for a little more of this in class than he did on the green card.’ And I’m like, ‘Okay. So how can we better make sense of it at home if we’re doing these experiments together and they’re kind of similar?’ So I would ask questions like that and she was like, ‘Wow, okay. I can show you. I can tell you exactly what I need for the next time.’” (T17; p16/17)

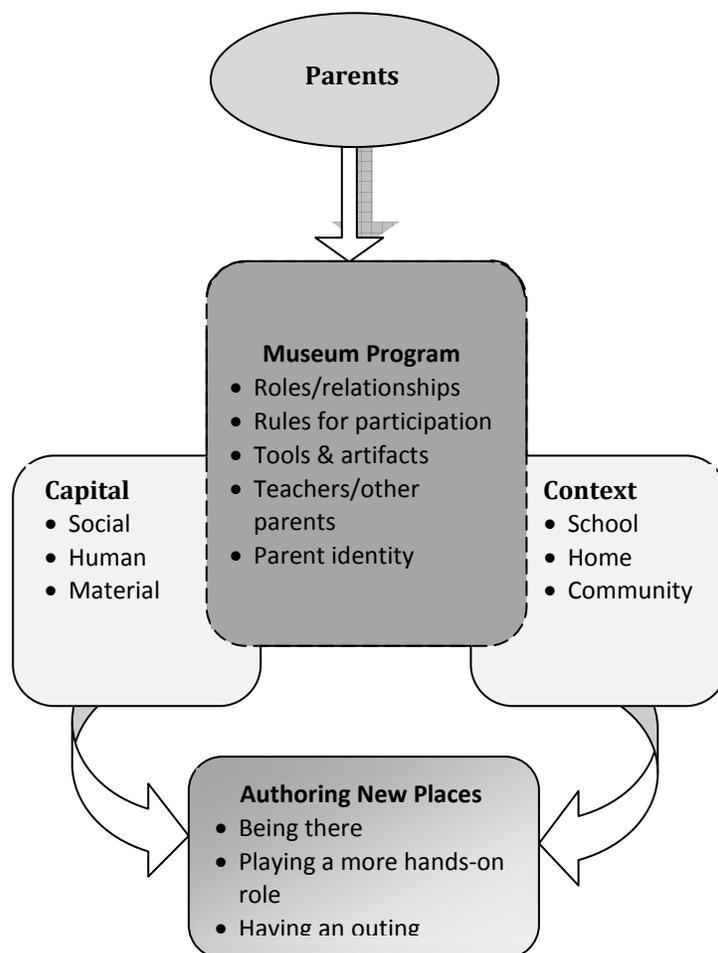
On the whole, only a few parents in this study positioned, making suggestions to teachers about how they might change their practice to better accommodate their child. The minimal occurrence of positioning amongst parents in this study raises questions about the theoretical fit of this concept for explaining how parent engagement happens. Data from this study suggest that it may not be reasonable to expect low-income, urban parents to be able to position themselves as authorities within their children's schooling, especially in light of the dominant school structure that places almost all control for children's learning in the hands of teachers and perpetuates a hierarchical relationship between teachers and parents. Parents in this study found multiple ways of authoring new ways to be engaged, but relatively few ways of capitalizing on that engagement in order to influence others relative to their children's schooling. In fact, few parents

demonstrated a desire to do that, and those who did admitted they were fairly vocal people to begin with and likely predisposed to advocate for their children by asking questions of the teacher. In this way, the theoretical concept of positioning may not only be unrealistic given the realities of low-income, urban parents' lives, but it may also favor those who tend to solve problems in more overt and confrontational ways.

The Model

Figure 4.1 below illustrates the model resulting from this study, an adapted version of the Ecologies of Parent Engagement model.

Figure 4.1. The adapted Ecologies of Parent Engagement model.



There are several points of discussion related to this adapted model that help to situate it within the literature, and reinforce its contribution to theoretical understandings of parent involvement. First, at a broad level, Figure 4.1 is closely aligned with the Ecologies of Parent Engagement model itself, not a fundamentally different model but rather an adapted model. That did not necessarily have to be the case. The purpose of the study was to listen to parents as they reflected on what this program meant to them, and how it provided them with opportunities to engage in their children's schooling. As it turned out, their reflections were best characterized by the EPE model, but it could have just as well been that their reflections did not fit at all with the EPE model.

Thus, the data from this study reinforce the value of the EPE for theorizing about the nature of parent involvement. More specifically, the value of the EPE model is: 1) it integrates processes and outcomes, considering the why, how, and what of parent involvement, rather than focusing on one at a time, which is what many models do; 2) it emphasizes the social aspects of parent involvement, rather than its psychological characteristics or the information that parents have; much of how parent involvement occurs is in fact strongly rooted within personal relationships, something that is not fully appreciated through models that focus on characteristics such as self efficacy; and 3) it is a parent-centered model, rather than a school-centered model, or said differently, it is an asset-based model, rather than a deficit-based model. The conclusion from most of the research and the models on which it is based are that school staff know best how parents should be involved, and privilege school-centered measures; the EPE allows parents to define for themselves both the contexts and the processes of involvement and what perspectives (on knowledge or on other individuals in the context) are important.

Second, at a more specific level, Figure 4.1 highlights the role that this museum program played in facilitating parent involvement. It shows that what the program did was to provide a “space” for parents to develop new relationships, take on new roles, or acquire new tools for participation. In some sense, the boundaries between the contexts were blurred, representing the creation of this new “space” for involvement. This comes back to a grounding principle within the dissertation – that museum programs can serve as intermediaries or bridge elements that give parents opportunities (and primarily social opportunities) for extending their engagement in their children’s schooling. This is an important contribution to the literature, since it was previously not clear what role museum programs could play in facilitating parent involvement. Is it that they motivate parents to participate more where they were not already? Is it that they get parents involved in another context (outside of school) where they were not already engaged? Is it that they teach parents specific skills for being involved? What the data here show is that first and foremost, what the museum program did was provide parents with everyday opportunities to develop new ways of interacting, new roles to play, and new tools to use within their interactions. Also important, the program gave parents a chance to reflect upon and even shift their parent identity relative to their children’s schooling, something that the previous model only implies. Figure 4.1 makes this parent identity piece explicit.

Third, even more specifically, Figure 4.1 refines the particular constructs within the EPE model itself, something that was very necessary given the vagueness of the model as it is described by Calabrese and something that is further explicated in the Discussion section. For example, this adapted model helps to clarify the constructs of both capital and authoring. In terms of capital, results from this study highlight the

importance of capital, and suggest it might be the building block in the process of facilitating parent involvement through a museum program. In particular human capital can be thought of as including a new understanding of what science is. Also, results point to three types of capital, and show what each type looked like and why it was valued by parents, something that previous work does only in generalities. In addition, results expand our understanding of authoring – what it looks like and how it happens in the context of a museum program. Calabrese’s work, and those who use her model, focus on the notion of presence, but they do not go any further. These results point to three different types of authoring, and ones that are context-specific, an important result since it parallels literature which has noted that home-based involvement is different from school-based involvement. Perhaps even more importantly, the ways in which parents in this study sample spoke about their engagement (being there, redefining roles, having an outing) are very different from how involvement is typically measured within the literature. That is an important contribution made by this model, as it expands traditional definitions and again reinforces the value of personal agency in a context, the value of shifting the locus of control from the school to the parents themselves. For example, had this study used Epstein’s measures of involvement, the results would have suggested that the program did not increase parents’ involvement, since they were already involved in the ways in which Epstein measures involvement, as specific school-sanctioned behaviors.

Finally, Figure 4.1 does not include positioning, as discussed earlier, since the data did not support this construct. There are numerous reasons why positioning did not emerge from the data. It could be that Calabrese’s study led parents to focus on that, by

virtue of her explicitly stated social agenda and her repeated contact with the same parents participating in focus groups and influenced by each other over multiple years. It could be that because her sample was composed of parents who were low-income, immigrant parents, they were strongly driven by obtaining social justice in the form of better schooling for their children, something that may not have been as big a factor for the more educated parents in this study who had stronger roots in this country. Regardless, Figure 4.1 makes an important contribution to the EPE model by raising questions about the relevance of positioning, at least as previously described. In fact, the idea of positioning may not be reasonable, precisely because it requires structural shifts in roles and relationships. Through the museum program, parents' roles and relationships shifted within that space, but they did not necessarily shift permanently, as many parents noted when they said that after the program ended, things went back to the way they were. The school and its power structure had not changed.

Parent Engagement Stories

In this section of the findings, three different parent engagement stories are shared. The purpose of these stories is to present a more holistic, interactional view of three particular pathways through the model presented in Figure 4.1. To this point, the results of this study have been considered in terms of individual constructs – building capital, authoring, and positioning – in an effort to fully understand each process. Here, the processes are examined in conjunction with each other relative to one particular parent's story of how the museum program facilitated their engagement in their child's schooling.

These three parents were selected because their stories illustrate the three dominant pathways through the model as parents activated specific forms of capital within particular contexts in order to more forge more personal connections to their children's schooling. In the first story, Amelia activates human capital in the home context as she renegotiates the role she plays within her children's science learning. In the second story, Wing activates social capital in the school context as he finds additional ways of being present in his daughter's school life. And in the third story, Susan activates both human and financial capital within the museum context as she comes to value outings to the museum as educational opportunities for her family.

*Story 1: Amelia*⁵

Amelia is an African American woman with an associate degree living in northeast Philadelphia. A single parent, she has four children ranging in age from 9 to 18 years. Her youngest child is currently home-schooled, after an incident at school that led Amelia to believe he was safer at home. Her 10 year old son, with whom she participated in the museum program, attends School B.

Amelia calls herself an involved parent. She home schools her youngest child, and tries to help her other children with homework when she can. She is involved in community efforts as well, such as the Police Athletic League that provides sports camps for children. Amelia participated in the museum program for four of the program's six years. During that time, she attended 8 events and completed at least 2 Exploration Cards. She recalls participating in the clean-up of Fairmount Park, an event organized by the

⁵ Pseudonyms have been used to keep parents' reflections anonymous.

museum program, as well as other events that were held there during the life of the program. Her reasons for joining the museum program center on fostering her children's interest in science: "I had kids that liked science and they wanted hands-on, and they liked something that Mom could do with them" (T4, p2). Like most parents in the study, Amelia perceived that the program would augment her children's school-based science learning, helping to broaden their thinking beyond just "what's in the book."

Through her program participation – specifically by engaging in events and activities alongside her children – Amelia saw what an important role she could play in their learning: "I knew it before, but it made it bring it out more. It made me realize that the kids need you. They can't just get educated by teachers in school. They need their parents to help with the education as well" (T4, p6). Over time, Amelia acquired valuable human capital in the form of an increased awareness of her son's interest in science, and an increased confidence on her part that she could in fact support this interest and perhaps even extend it through efforts outside of school. In her words, the program gave her "ideas" for things she could do at home. After doing the Exploration Cards, she bought books for her children featuring simple science experiments, and they started doing experiments themselves at home.

In this way, Amelia came to see what science instruction at her children's school "could be." She became increasingly disappointed with the book-focused instruction that seemingly occurred in School B's science program, and used the museum program as a way to volunteer in the science classroom periodically in order to better understand what was happening there: "It made me realize there was a need for me to be there" (T4, p13). What she saw in the classroom confirmed her suspicion that her children were not

exposed to enough hands-on discovery in science, and she began conversing with teachers to suggest new ways of teaching science that would be more engaging for her children:

“I think before the program, I was just letting them go to school and letting them get taught and not really paying attention to...not really giving them ideas and stuff about things...now I go to the school and give ideas to the teachers on how I think my kid could improve on different things if they did certain things.” (T4, p11)

Through the museum program, Amelia gained traditional capital about science learning and instruction that she then leveraged in multiple ways. She became more involved at home, trying to facilitate science learning for her children through home-based activities and experiments. In addition, she became more vocal and active within her child’s school, increasing her presence in the science classroom. Over time, she used her increased presence in the school to advocate for alternative forms of instruction in the science classroom, instruction that would be more closely aligned with the discovery and experimentation that were at the core of what her children loved about science.

Story 2: Wing

Wing is an Asian American man, married with a 13 year old daughter. He has a high school education, and while his spoken English is proficient, his first language is Cantonese. His family lives in northeast Philadelphia. His daughter attended School B through 8th grade, and now attends a highly ranked private school in Philadelphia.

By all accounts, Wing is an involved father. He attends school functions; he helps his daughter with her homework; and he and his wife work hard to provide out-of-school learning experiences for their daughter on a regular basis. Wing participated in the

museum program for all six years, from 2000 through 2006. He attended 8 events and completed 4 Exploration Cards with his daughter. He participated in several activities held in the local park, such as the May Day. When asked why he joined the museum program, Wing talks about how important it is for children to explore outside of the classroom environment: “If I want my daughter to be successful in school, she has to learn to explore many, many different things. You can you can just look at a book and answer the questions, but that’s not the only way. You have to go out, explore, talk to different people” (T14, p3).

For Wing, the museum program gave him an opportunity to build social capital through informal conversations with his daughter’s teachers: “It gives you more opportunity to talk. The more you talk to school staff, the more you understand their goals and how to make it better for the kids. So it gives me more understanding...more broad spectrum of my daughter’s school life” (T14, p5). Wing then leveraged this social capital in order to increase his presence within his daughter’s schooling. For example, he worked closely with his daughter’s teachers to identify and select which high school she would attend. And while many of the conversations he had with teachers on this subject were more “formal” and “intense,” he also made use of informal moments to talk with teachers on this subject, asking them questions as the class was walking to the park for a museum program activity. For Wing, these more informal conversations helped him to really probe into what teachers were thinking, and what they knew about his daughter: “Because when they talk outside your conference, they’re not just talking about ‘She’s behaving well. She’s learning well.’ They can do more detail. Like, ‘When I talk, she listens. Her eyes spark.’ Things like that” (T14, p10). Wing used details like these to

check his own assumptions about his daughter's learning strategies and processes, and inform his agenda for her continued education.

Through the museum program, and specifically the events he attended at his daughter's school, Wing built social capital in the form of increased, more informal conversations with his daughter's teachers. He activated that capital to paint a more detailed picture about his daughter's school life in order to monitor her progress in a more nuanced fashion.

Story 3: Susan

Susan is a Caucasian woman, an active and engaged mother of three children. She lives in north Philadelphia with her husband and their children. Her daughter is 14 years old and in 9th grade. Her other two children are in 5th grade. One of them has special needs, and Susan spends much of her time in various therapy programs with her. She also looks after her father, who lives with them. All three of her children attended School A.

Susan characterizes herself as very involved with her children's schooling. She is currently the President of School A's Home and School Association, and has been an active member of the HSA for the last 9 years. She attends school functions, and regularly helps her children with their homework. Each year, she works on the Carver Science Fair project with her children, a school-required project for School A students.

Susan participated in the museum program for six years, from 2000 through 2006. She attended 17 events and completed 24 Exploration Cards with her children. She often did the Exploration Cards multiple times, first with her oldest daughter and then with her younger children. For the last three years, she has volunteered to take care of the school's garden (created as part of the museum program) for one week each summer. When asked

why she joined the museum program, she talks about how important it is for her children to learn about science: “It got them more interested in science, and showed her different things in science besides the book and tests” (T2, p8).

Susan’s most vivid program memory is going to The Franklin Institute with her children. She recalls multiple times when they visited the museum, explaining that she wanted to make sure her family made good use of the gift of free membership. At the museum, her children were inspired in multiple ways. It was there she saw her oldest daughter’s interest in science expand and take shape. It was a great place for hands-on play for her youngest two children. It was a resource for the school-required science fair projects her children did each year.

As Susan saw her children’s interest in science grow, she supported this interest by seeking out opportunities for them to engage in science outside of school. Science museums became the perfect way for her to facilitate her children’s learning, but she admits that taking them to museums is something she would not have done if it were not for this program:

“When we were away, we went to Virginia two weeks ago, and we were looking at where we wanted to go, and say, ‘Okay, we can go to Bush Gardens, we can go to the Colonial Village’ and then I said, ‘Oh yes, and I think there’s also the Virginia Air and Space.’ And they picked that. I would have liked Bush Gardens, but we took a day and we went down to the Air and Space and we saw the different scientific things they have there. I wouldn’t have done that before. I wouldn’t have looked into a science museum.” (T8, p9)

Through the museum program, Susan not only gained access to her local science museum, but came to appreciate science museums in general as community-based learning resources for her children. Now, whenever they travel to a new city, they make a point of visiting the local science museum. For Susan, these visits not only provide an

important learning opportunity for her children, but they also give her a chance to feel as though she's being a good parent, supporting her children's interests.

All three of these stories illustrate the various ways in which the museum program facilitated parent engagement, and specifically how parents not only acquired much-needed capital through the program, but how they leveraged that capital to negotiate new ways of engaging in their children's schooling. Amelia drew upon her human capital to create new strategies for facilitating her children's science learning at home. Wing used his social capital to monitor and better understand his daughter's progress in the classroom. Susan activated her material capital to make use of science museums as places where she and her children could engage in science together.

Summary

Through extensive and iterative analysis of interview data, parents' detailed reflections were synthesized in order to generate theoretical propositions describing the nature of parent engagement, and the mechanisms through which the museum program facilitated parent engagement. Six theoretical propositions emerged from the data, clustered around the categories of building capital, authoring, and positioning. Taken together, they argue that what the museum program did for parents was to provide them with more informal, personal ways of connecting with their children's schooling. Examined closely, this parent engagement fits with sociocultural definitions, highlighting the highly contextual and social nature of this phenomenon; pointing to the importance of considering the processes and resulting activities in concert; and reinforcing the importance of broadening the definition of engagement to include nontraditional ways of connecting to school, such as increased presence or redefined roles. A case was made for

the unique role that a museum program can play in facilitating parent engagement, highlighting the fact that it helped parents' build capital, provided opportunities for them to create informal, personal forms of engagement, and situated them more squarely in control of their children's learning. An adapted Ecologies of Parent Engagement model was put forth to illustrate these results, and comparisons were made to the original model. The next chapter focuses on the implications of these findings.

Table 4.1: Data matrix showing core categories by study participant.

#	Parent Information	Capital	Space	Authoring Place	Positioning for Influence
1	<ul style="list-style-type: none"> • Mother – twin girls 14 yrs • School A • PPSS 6 yrs (10 events/17 EC/legacy project) • Caucasian 	Social capital (Interacting with teachers)	School	Being there (Feeling connected to the school)	NA
		Material capital (Going to the museum)	Community (museum)	Taking kids to the museum	
2	<ul style="list-style-type: none"> • Mother – daughter 16 yrs; twin boys 14 yrs • School A • PPSS 6 yrs (17 events/21 EC/legacy project) • Caucasian • Belonged to HSA for many years 	Social capital (Interacting with teachers)	School	Being there (Seeing what goes on at school)	NA
		Human capital (Seeing kids' interest in science)	Home	Playing a more hands-on role (Working more directly with kids)	
3	<ul style="list-style-type: none"> • Mother – daughter 14 yrs (5 children total) • School A • PPSS 5 yrs (4 events/9 EC) • Caucasian 	Social capital (Interacting with teachers)	School	Being there (Monitoring kid's progress)	NA
		Human capital (Doing science with kids)	Home	Playing a more hands-on role (More involved in homework)	
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum	
4	<ul style="list-style-type: none"> • Mother – two sons 9 and 10 yrs (4 children total) • School B • PPSS 4 yrs (8 events/2 EC/legacy project) • African American • Currently home-schools youngest 	Social capital (Interacting with teachers)	School	Being there (Seeing what goes on in classroom)	<ul style="list-style-type: none"> • Advocating for her kids • Making suggestions to teachers
		Human capital (Getting ideas and resources)	Home	Playing a more hands-on role (Doing science at home)	
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum	
5	<ul style="list-style-type: none"> • Mother – son 12 yrs • School A • PPSS 5 yrs (5 events/8 EC) • Caucasian 	Human capital (Seeing kid's learning process)	Home	Playing a more hands-on role (Taking a different role in homework)	NA
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum	
6	<ul style="list-style-type: none"> • Mother – son 11 yrs • School A • PPSS 4 yrs (5 events/11 EC) • Asian (immigrated from India) 	Human capital (School science)	School	Being there (Seeing what goes on at school)	NA
7	<ul style="list-style-type: none"> • Mother – son 14 yrs (3 children total) • School B • PPSS 4 yrs (7 events/14 EC) • African American 	Human capital (Seeing kids' interest in science)	Home	Playing a different role (Doing more with the kids)	<ul style="list-style-type: none"> • Advocating for her kids • Making suggestions to teachers • Questioning teaching practices
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum	

#	Parent Information	Capital	Space	Authoring Place	Positioning for Influence
8	<ul style="list-style-type: none"> • Mother – daughter 14 yrs (3 children total) • School A • PPSS 6 yrs (17 events/24 EC/ legacy project) • Caucasian • Belongs to HSA (in her 7th yr) 	Social capital (Interacting with teachers)	School	Being there (Monitoring what goes on in class)	NA
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum (Taking kids to other museums)	
9	<ul style="list-style-type: none"> • Father – son 11 yrs (2 children total) • School A • PPSS 4 yrs (6 events/6 EC/legacy project) • Caucasian 	Social capital (Interacting with teachers)	School	Being there (Understanding what goes on in class)	<ul style="list-style-type: none"> • Making suggestions to teachers • Questioning teaching practices
		Human capital (Seeing kid's learning process)	Home	Playing a more hands-on role (Taking a different role in homework)	
10	<ul style="list-style-type: none"> • Mother – daughter 14 yrs (2 children total) • School A • PPSS 6 yrs (16 events/26 cards/legacy project) • Caucasian • Volunteered in child's class weekly 	Social capital (Belonging/reason to be there)	School	Being there (Seeing what goes on at school)	NA
		Human capital (Doing science with kid)	Home	Playing a more hands-on role (Taking a different role in homework)	
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum	
11	<ul style="list-style-type: none"> • Mother – daughter 12 yrs • School B • PPSS 4 yrs (3 events/6 cards) • African American 	Human capital (School science)	Home	Being there (Feeling more connected to kid's learning)	NA
12	<ul style="list-style-type: none"> • Mother – two children in program – daughters 14 and 11 yrs (4 children total) • School A • PPSS 3 yrs (19 events/15 cards/legacy project) • Black (first language is Arabic) 	Social capital (Interacting with teachers)	School	Being there (Getting answers to questions)	NA
		Human capital (School science)	Home	Playing a more hands-on role (Doing science <i>with</i> kids)	
		Material capital (Using museum membership)	Community (museum)	Engaging with kids at the museum	
13	<ul style="list-style-type: none"> • Father – son 13 yrs (has other adult children) • School B • Participated in PPSS for 2 yrs (7 events/10 cards) • African American • Participates in an informal “parent association” 	Social capital (Interacting with teachers)	School	Being there (Seeing what was going on at school)	
		Human capital (Seeing kids' interest in science)	Home	Playing a more hands-on role (Becoming closer with his son)	

#	Parent Information	Capital	Space	Authoring Place	Positioning for Influence
14	<ul style="list-style-type: none"> Father – daughter 13 yrs School B PPSS 6 yrs (8 events/4 cards) Asian (first language is Cantonese) 	Social capital (Interacting with teachers)	School	Being there (Getting a picture of kid's school life)	NA
		Material capital (Going to the museum)	Community (museum)	Engaging with kids at the museum	
15	<ul style="list-style-type: none"> Mother – son 11 yrs School A PPSS 2 yrs (5 events/3 cards) African American 	Social capital (Interacting with teachers/being in the school)	School	Being there (Feeling more comfortable in the school)	NA
		Human capital (Doing science with kid)	Home	Playing a more hands-on role (Teaching him patience/persistence)	
16	<ul style="list-style-type: none"> Mother – 2 daughters 8 and 11 yrs School A PPSS 3 yrs (3 events/3 cards/legacy project) Caucasian 	Human capital (Seeing kids' interest in science)	School	Being there (Feeling more comfortable being involved in science at school)	NA
		Human capital (Knowledge of science; doing science with kids)	Home	Playing a more hands-on role (Having language/strategies for being involved in science; doing more science)	
17	<ul style="list-style-type: none"> Mother – 2 sons 11 and 15 yrs School A PPSS 6 yrs (6 events/11 cards/legacy project) African American 	Social capital (Connecting with parents)	School	Being there (Checking in with other parents)	<ul style="list-style-type: none"> Asking science teacher questions about how to work with child at home Questioning science grades
		Human capital (Interest in/knowledge of science; strategies for facilitating science learning)	Home	Playing a more hands-on role (Helping with science homework where previously made Dad do it)	
18	<ul style="list-style-type: none"> Mother – daughter 10 yrs & son 8 yrs School A PPSS 3 yrs (12 events/2 cards/legacy project) Caucasian 	Social capital (Interacting with teachers)	School	Being there (Asking teacher about other resources)	NA
		Human capital (Doing science with kid)	Home	Playing a more hands-on role (Experimenting with kid)	
		Material capital (Going to the museum)	Community (museum)	Engaging with kids at the museum (Seeing museums as learning resources)	
19	<ul style="list-style-type: none"> Mother – daughter 10 yrs School A PPSS 2 yrs (7 events/5 cards) African American 	Social capital (Interacting with teachers; Connecting with parents)	School	Being there (Feeling more comfortable in school)	NA
		Human capital (Doing science with kid)	Home	Playing a more hands-on role (Interacting more with kid)	
20	<ul style="list-style-type: none"> Mother – Daughter 10 yrs School A PPSS 3 yrs (5 events/3 cards) Caucasian 	Social capital (Interacting with teachers; Connecting with parents)	School	Being there (Feeling more comfortable in school)	NA
		Material capital (Going to the museum)	Community (museum)	Engaging with kids at the museum (Seeing museums as learning resources)	

Chapter Five: Discussion

Overview

This final chapter of the dissertation focuses on the study's implications. It does this at two different levels. The first section reviews the overall study and discusses its limitations, highlighting where future research might extend this work. The second section addresses the specific findings from the study, discussing them in light of existing literature and highlighting implications for theory, research, and practice.

Review of the Study

This study was designed to generate theoretical propositions about the processes of parent engagement, and more specifically to highlight the role that a museum program can play in facilitating parent involvement. Research has shown that parent involvement is an important predictor of children's achievement (Cox, 2005; Christenson & Sheridan, 2001; Fishel & Ramirez, 2005; Henderson & Mapp, 2002). Yet not enough is known about the ways in which parent involvement actually occurs – why parents become and remain involved, and how they connect to their children's schooling. Increasing the frequency and quality of parent involvement requires a clearer understanding of these processes.

This study did not seek to generate new theoretical constructs of parent involvement, but rather to work from an existing theoretical framework. Specifically, the study was grounded in The Ecologies of Parent Engagement model (Calabrese Barton et al, 2004), a sociocultural framework that views parent involvement as a dynamic, distributed process that exists within the relationships parents form with other school-based agents. The EPE framework emphasizes not *what* parents do to engage with their

children's school, but rather *how* and *why* parents are engaged, and the complex *ways* in which their engagement occurs (and its ramifications). Drawing upon cultural-historical activity theory, the EPE framework examines parents in relation to their environment and emphasizes the importance of the individual within the larger social context: "Parental engagement...is more than just an object or an outcome. Engagement is a set of relationships and actions that cut across individuals, circumstances, and events that are produced and bounded by the context in which that engagement takes place" (Calabrese Barton et al., 2004, p. 6).

Answering recent calls to study the effects of connecting community agencies with schools to encourage parent involvement (Hiatt-Michael, 2006; Bouffard, 2008), this study was conducted in the context of a multi-year museum program, a partnership between The Franklin Institute Science Museum and three elementary schools in inner-city Philadelphia. Specifically, the following research question was addressed: "How does a museum program provide opportunities for parents in a low-income, urban community to engage in their child's schooling?" Sub-questions under this primary research question guided the development of theoretical propositions; they included the following: 1) How are parents engaged in their children's schooling as a result of participation in the museum program under study? 2) What were the conditions that facilitated parents' involvement through the program? 3) What were the obstacles that hindered parents' involvement? 4) To what extent does the EPE framework and its constructs describe the mechanisms through which the museum program facilitated parent involvement? The goal of the study was not to demonstrate that the museum program had an impact on parents, but rather to use the context of the program to better

understand the nature of parent involvement as it occurs within a low-income, urban community.

Qualitative methods were used within a grounded theory approach. In-depth, semi-structured, retrospective interviews were conducted via telephone with 20 parents who had participated in the museum program; follow-up interviews were conducted with 3 of these parents to conduct a member check on the overall theoretical propositions. Parent interview data were analyzed in a step-wise, iterative fashion according to the constant comparative method (Charmaz, 2000; Glaser & Strauss, 1967; Strauss & Corbin, 1990).

Limitations of the Study

This study was focused on parents who participated in a specific museum program, in a specific city, and thus the findings are specific to this context. However, these findings can be used to generate theoretical propositions and raise additional questions about how parents engage in their children's schooling more widely. Future research might focus on another parent-based museum or community program with similar goals but in a different location and context.

Data collected in this study were limited to self-reports from parents, and more specifically retrospective self-reports years after parents had completed the museum program. The scope of the study did not permit data collection from children or teachers who participated in the museum program, nor did it permit the collection of data beyond that which was self-report, for instance including direct observations of parents' involvement practices. Future research might include multiple data sources in order to triangulate findings and present a more holistic picture of parent engagement.

Parents who participated in this study were not representative of all those who had been part of the museum program during its implementation from 2000-2006. In fact, the sample for this study was biased in several ways. First, participating parents had attended more events and completed more of the home-based activities than other program parents. Second, parents who agreed to participate in this study rated the program higher in terms of its impact on their parent involvement as measured by a 6-item scale on the program-exit questionnaire. Third, participating parents had higher education levels than other program parents. Taken together, these biases clearly indicate that the study's findings represent a "best case" scenario relative to how the museum program facilitated parent involvement; it would not be appropriate to generalize these results to all parents who participated in the program. In addition, it should be noted that only English-speaking parents were included in this study. It is possible that those parents who spoke another language had a different experience in the program, and engaged differently with their children's schooling.

Other limitations included the researcher's role as the investigator, which may have resulted in social desirability or satisficing during the interviews, since many of these parents knew the investigator as the program evaluator from years before and/or may have seen her as a representative of the program. It is possible that parents' overwhelmingly positive comments about the program were in part due to this perception. However, this is a common trade-off within qualitative research, since this relationship is what provided access to this population and the research context.

Summary of the Findings and Implications for Research and Practice

In this section, study findings are summarized and then discussed with a particular focus on theoretical and practical implications. Connections are made between the findings here and previous research in order to articulate directions for research and practice related to parent involvement in children's schooling.

Summary of the Findings

Through extensive and iterative analysis of interview data, parents' detailed reflections were synthesized in order to generate theoretical propositions related to the nature of parent involvement, and the role of a museum program in facilitating parent involvement. Findings revealed a two-part story. At a macro level, analysis showed that the museum program engaged parents in informal, personal ways that were different from the ways they were already involved in their children's schooling. At the core of the analysis is the phenomenon of parent engagement – as opposed to involvement – that emphasizes the relationships parents built relative to their children's schooling, and the contextual nature of their resulting engagement, similar to the Ecologies of Parent Engagement model (Calabrese Barton et al., 2004).

At a micro level, three categories detail the mechanisms through which the museum program facilitated engagement. The goal here was not to create categories from scratch, but rather to ground the analysis in parents' language and experiences while at the same time drawing upon existing concepts in the literature. After careful, iterative analysis using grounded theory techniques and procedures, two core categories were determined to best describe the mechanisms through which the museum program facilitated parent engagement – building capital and authoring. These categories were

drawn from the Ecologies of Parent Engagement model (Calabrese Barton et al., 2004), which puts forth that parent involvement must be understood in situ, as a contextual process that involves the mediation of capital and space relative to other individuals.

Within each of the three categories identified, theoretical propositions articulate the various forms that these processes took. For instance, building capital included social, human, and material capital, while authoring included increased presence within school life, new strategies for engaging with children at home, and out-of-school activities for parent/child interaction during discretionary time. Again these subcategories were informed by the Ecologies of Parent Engagement model. Analysis at this level also identified specific components or features of the museum program that parents attributed to that particular process – for instance, parents mostly attributed their acquisition of human capital to the home-based activities within the program. In this way, the three core categories (and their subcategories) were linked to particular program components through parent data.

How might these findings influence the ways in which parent involvement is currently defined and measured within the literature? What do they suggest about specific strategies that might be used to increase and enhance parent involvement within low-income, urban communities? Discussion now turns to the implications of study findings, highlighting what they mean for relevant theory, research, and practice relative to parent involvement.

Reframing Theoretical Perspectives of Parent Involvement

Research about the process of parent involvement – focusing on why parents get involved and how they connect with their children’s schooling – is evolving. During the

last decade, calls have been issued for more cohesive theoretical models and frameworks to inform our collective understanding of the mechanisms and conditions that give rise to parent involvement (Jordan et al., 2001).

Findings from this study lend support to the validity of The Ecologies of Parent Engagement framework, and suggest that parent involvement is best defined as a contextual process, one that is mediated by the resources a parent has access to and can activate within the affordances and constraints of a particular space. Perhaps even more important, framing parent involvement in this way requires that the processes and the outcomes be considered together, not as two separate phenomena but rather as one integrated whole.

This sociocultural perspective is not a dominant one in the parent involvement literature. For the most part, the research that looks at how parent involvement occurs tends to adopt an approach common to a focus on the individual's psychology, examining parents' presumably stable motivations for involvement and how those influence decisions to become involved (Chrispeels & Rivero, 2001; Deslandes & Bertrand, 2005; Green et al., 2007; Reed et al., 2000). Using this approach, individual psychological constructs such as parents' beliefs (e.g., self efficacy) and their perceptions of teacher invitations for involvement are used to predict and explain specific parent involvement behaviors, such as volunteering in the child's classroom and supervising homework. More recently, a variable described as parents' life context, including their skills and knowledge, is proposed to mediate this relationship, although empirical research has not clarified exactly how that occurs (Walker et al., 2005; Green et al., 2007). While this psychological approach has made important contributions to the understanding of why

parents are involved, it says little about how parents get involved and maintain their engagement. It may be that the use of surveys to collect this data limits a broader contextual understanding, but regardless, this approach does not emphasize the complex interactions between the “why,” “how,” and “what” of involvement, as was seemingly important to parents in this study. Parents here talked less about individual, psychological factors related to their engagement, and more about social factors that emerged from and were leveraged within a specific context. In this way, this study contributes to a small body of research that defines parent engagement from a sociocultural perspective, emphasizing its social and contextual nature (Calabrese Barton et al., 2004; Carreon, Drake & Calabrese Barton, 2005; Jackson & Remillard, 2005).

Not only does this study suggest a need for reframing perspectives on how parent engagement occurs, but it also points to a need for rethinking existing measures of what parents actually do when they are involved. Much of the research on parent involvement employs Epstein’s (1987; 1995) typology to measure the frequency with which parents engage in school-defined involvement behaviors, such as supervising their children’s homework and attending school functions (Henderson & Map, 2002; Jordan et al., 2001). This study supports previous research emphasizing the need for parent-centered definitions of engagement (Calabrese Barton et al., 2004; Carreon, Drake & Calabrese Barton, 2005; Jackson & Remillard, 2005; Mapp, 2003), and showing that parent engagement practices include not just specific, school-centered behaviors but also behaviors such as monitoring children’s progress and redefining the role that parents play in engaging with their child. If this study had employed the typical measures for parent involvement practices, findings would have simply revealed the ways in which parents

were already engaged in their children's schooling, not the new places they authored through their participation in the museum program. This study offers more inclusive and more sensitive definitions of parent engagement, ones that were described by parents themselves. Future research needs to test these forms of engagement to determine their fit for other parents in other contexts.

Finally, findings from this study point to several possible ways in which the EPE framework might be further refined through careful elaboration and clarification of constructs. While this framework clearly articulates that parent engagement is the mediation of space and capital, it does little to clarify how parents actually acquire capital and what they do with it. This study clarifies that process, suggesting not only that an intervention program can actually influence the acquisition of parents' capital, but also showing that in this context there were multiple forms of capital acquired by parents, each meaningful and useful to them within a particular context. More specifically, this study highlights the importance of social capital for parents, and the powerful role it can play in helping parents to increase their presence within their children's schooling. The study also suggests that a museum program may in fact facilitate the development of human capital broadly defined, including not just traditional forms of content knowledge but also less traditional forms of knowledge, such as better understanding a child's learning process and what they value about their own learning (Brophy, 2008).

In addition, the study helps to clarify the construct of authoring. Again, while the EPE framework posits that authoring is a key action through which engagement occurs, research using this framework centers almost entirely on the notion of presence, only articulating various forms that presence can take (Calabrese Barton et al., 2004; Carreon,

Drake & Calabrese Barton et al., 2005). This study reinforces the notion of presence as an overlooked form of parent involvement, but also goes further to show that authoring can take multiple forms, depending on the context and the resources available to parents. For some parents in this study, authoring took the form of a redefined role within their child's science learning at home; for others still, it took the form of an increased appreciation for and use of museums as places for parent/child interaction. Further research needs to investigate these dimensions of authoring, and test their applicability outside of this research context.

The study also raises questions about the construct of positioning as it is put forth in the EPE framework. Although Calabrese Barton et al. found evidence of positioning in their study of low-income, immigrant parents in urban Texas, there was little evidence of it amongst the parents studied here. It is possible that positioning requires more capital than these parents here had. It is also possible that the construct of positioning is confounded by aspects of parent personality and/or identity, for instance having more to do with how parents tend to approach and/or solve issues in general than to do with how they engage in their children's schooling. Or these particular schools, either by policy or by chance, presented a different set of affordances and constraints to parents. Regardless, this study shows that further research is needed to understand the value and application of this aspect of the EPE framework.

Findings from this study also point to the need for further research on the role of parent identity relative to engagement in their children's schooling. Findings here suggest that in the context of a museum program, parents had the opportunity to reframe aspects of their identity, coming to see themselves differently relative to science, for instance.

Identity is implicit within the EPE framework, but it is not clear exactly what role it plays. Further research is needed to understand this component of the framework, and specifically the dimensions along which the reframing of parent identity occurs.

Overall, results from this study suggest the need for rethinking dominant theoretical perspectives on parent involvement. A sociocultural approach, emphasizing parent engagement, focuses squarely on context, and acknowledges that parent engagement is framed not only by parents' motivations, but by their relationships with individuals and institutions related to their children's schooling. In addition, such an approach reinforces the need for parent-based definitions of what counts as involvement which are often overlooked in research that uses school-sanctioned forums for involvement as the only measures. Next, consideration is given to research-based implications for studying parent involvement.

Investigating Parent Involvement

Research on parent involvement intervention programs tends to focus on school-based initiatives, typically created and implemented by district or school staff in order to increase parents' involvement in school-sanctioned behaviors. Much is known about how school structures and activities influence involvement, but we know less about how parents perceive and use these structures and activities in order to further their goals for their children's development.

This study demonstrates the value of a museum program as a research setting for investigating parent involvement, a setting that includes structures and activities created not by school staff, but rather by a third party community agency with an agenda that can be more inclusive of both schools' and parents' needs, and a deep knowledge and

expertise relative to how parents and children interact and learn together. As stated at the outset of this study, Hiatt-Michael (Bouffard, 2008) recently called for more research to be conducted in family-community contexts. This study answered that call to action, suggesting not just that a museum program can serve as a useful setting for conducting parent involvement research, but also that museums might have much to offer in terms of their contribution to the parent involvement field. The study's purpose was not to compare the effectiveness of schools and museums in facilitating parent involvement – both institutions clearly have capacity in this regard – but rather the purpose was to understand parents' perceptions of how the museum program provided them with opportunities to engage in their children's schooling.

Through their participation in the museum program, parents gained additional resources that they then used to find new places to connect to their children's schooling, demonstrating that a museum program can promote parent involvement. But more importantly, parents in this study articulated that there was something different about the forms of involvement that occurred through the museum program as compared to the existing ways in which they were involved in their children's schooling. They emphasized that involvement through the museum program was more informal, relaxed, fun, and easier. This suggests that over time a museum program may not just facilitate parent involvement, but it may facilitate parent involvement in ways that are qualitatively different in some respects from other parent involvement intervention programs. There may be a unique value to such museum programs that should be investigated further, and that would begin a research program that compares the contributions made by different

types of parent involvement programs. Discussion now turns to the study's implications for practice.

Practical Strategies for Facilitating Parent Involvement

Findings from this dissertation study also reveal several implications related to practical strategies for promoting parent involvement in children's schooling. First, the study's results reinforce existing research that highlights the need for schools to both understand and work to accomplish parents' goals for their children's education, rather than assuming that they know what is best and that their goals are the same as parents' goals (Carreon, Drake & Calabrese Barton, 2005; Jackson & Remillard, 2005; Lopez, 2001; Mapp, 2003). In short, the study reinforces previous research that clearly points to the power differential between school staff and parents, and emphasizes that even low-income parents who are fairly well educated still feel uncomfortable, intimidated, and disenfranchised within their child's schooling. What the museum program did was provide parents with tools for navigating the power differential, the discomfort, and the disenfranchisement. Such tools are lacking within schools, and more parent involvement efforts need to focus on helping parents to navigate the existing terrain, in addition to trying to change the terrain itself. Furthermore, educators seeking to promote parent involvement might consider programs that target both parents and teachers, putting them together on equal footing, as opposed to programs in which school staff instruct parents about what goes on at school and how they can be involved.

Second, the study's findings point to the possibility that the building of capital may be a crucial entry point for influencing parent involvement. First and foremost what the museum program did was help parents to acquire resources relative to their children's

schooling; especially important were the social resources that parents had access to and the relationships they built with teachers. Previous research has suggested that parent/teacher relationships are key to parents' school-based involvement (Hoover-Dempsey et al., 2005; Green et al., 2007). Future efforts to promote parent involvement in children's schooling might consider ways to bring parents and teachers together socially, as equals and in ways that permit extended conversation about children's development.

Finally, the museum program studied here targeted not just parents, which is typically the case with parent involvement programs (Mattingly et al., 2002), but rather parents and children. When asked why they participated in the program, parents typically referenced the fact that they wanted their children to learn more about science, and they wanted opportunities to do fun and educational activities together with their children. During interviews, parents sometimes had to be pushed to think about the museum program as a parent involvement initiative, a program that targeted them. For parents, this was very much a program for them and their children. As such, what the program did was to offer parents opportunities to more closely relate to their child. Parents had a chance to learn more about their child, what she was interested in and how she solved problems. Parents were able to monitor their child's progress in ways that were specific to her particular issues, for instance realizing through interactions with the science teacher that what her child told her about the teacher was only one perspective. Parents were also able to redefine their role in their child's learning at home in ways that were specific to her particular issues, for instance seeing that a child was struggling to solve problems during homework assignments. Unlike many parent involvement programs that provide parents

with generic, skills-based strategies for helping their children with homework, this program gave parents meaningful opportunities to engage with their child around specific ideas and issues. The embedded nature of this approach may well be something that other parent involvement programs might seek to replicate.

Summary

The purpose of this study was to generate theoretical propositions describing the nature of parent involvement amongst low-income, urban parents, and specifically the role that a museum program can play in facilitating parent involvement. Grounded theory methodology was used, an approach in which “theory evolves during the actual research, and it does this through continuous interplay between analysis and data collection” (Strauss & Corbin, 1994, p. 273). In-depth, semi-structured, retrospective interviews were conducted via telephone with 20 parents who had participated in a museum program created by The Franklin Institute Science Museum, and implemented between 2001 and 2006. Parent interview data were analyzed in a step-wise, iterative fashion according to the constant comparative method (Charmaz, 2000; Glaser & Strauss, 1967; Strauss & Corbin, 1990).

At a macro level, analysis reveals evidence to support the definitional shift from parent involvement to parent engagement. Through the museum program, parents engaged in their children’s schooling in ways that were different from their existing forms of involvement, ways that were more informal, relaxed, and personal in nature. In addition, parents engaged in ways that were highly social and contextual, involving the activation of specific forms of capital as mediated by the values and constraints of a particular context. Whereas other frameworks in the literature often separate the “why”

and “how” of involvement from the “what” of involvement, this study provides evidence to suggest that definitions of parent engagement should consider all of these elements in concert.

At a micro level, findings identify the mechanisms through which the museum program facilitated parent engagement. More specifically, the data fit with two of the three constructs from the Ecologies of Parent Engagement model, namely building capital and authoring. The museum program helped parents to build multiple forms of capital; parents then activated that capital within a specific context in order to find new places to engage in their children’s schooling. In keeping with the definitional emphasis on engagement rather than involvement, the places parents authored were more personal in nature than their existing forms of involvement. Whereas most parents were already attending school functions or involved in the PTA or volunteering in their child’s classroom, the museum program helped them to feel more connected to the fabric of their children’s school, to feel more comfortable or even empowered in the school, and to find ways to monitor or check what was going on in their child’s classroom. In addition, the museum program provided parents with opportunities to reframe their parent identity in ways that more closely aligned them with their children’s schooling, for instance helping them to see themselves as someone who could help their child with science.

Overall, this study highlights the need for reframing parent involvement, supporting a shift from individual parents’ psychology to instead focusing on the individual in context, as is the emphasis in parent *engagement*. Such a shift makes visible not only the social and cultural negotiations through which parent involvement occurs, but also the more informal, personal manifestations of involvement amongst low-income,

urban parents. The study also highlights the important role that a museum program can play in facilitating involvement, and suggests the need for future research using family-community sites of parent involvement in order to better understand this phenomenon.



Appendix A

Parent Partners in School Science!

We want to know more about your experience with PPSS! Please help us by answering the following questions. If you have more than one child who has been involved in the program, complete only **one** survey, answering questions based on **ALL** of your children.

Your Full Name: _____

Tell us about your involvement in Parent Partners in School Science (PPSS):

1) How would you describe the goals of the Parent Partners in School Science (PPSS) program?

2) Why did you get involved with the Parent Partners in School Science (PPSS) program?

3) During what school years have you and your child(ren) participated in PPSS?
Check ALL that apply.

- 2005/2006 (Current school year)
- 2004/2005 (Last school year)
- 2003/2004
- 2002/2003
- 2001/2002
- 2000/2001

4) What PPSS events have you participated in at your child(ren)'s school? Check ALL that apply, even if your child(ren) attended the event with someone other than you.

2004-2005 School Year

- Parent Involvement Day** doing science in your child's classroom during lunch Nov. 23, 2004 (Tues. AM)
- Student plays** about science (gym) & science activities on playground during lunch June 6, 2005 (Mon. AM)

2003-2004 School Year

- Parent Involvement Day** doing science in your child's classroom during lunch Oct. 16, 2003 (Thurs. all day)
- Opening of Discovery Room**, exploration of hands-on science projects in Discovery Room, classrooms, and hallway nearby Dec. 4, 2003 (Sat. AM)
- School field trip** to The Franklin Institute Dec. 22, 2003 (Tues. PM)
- Parent Involvement Day** doing science in your child's classroom during lunch May 4, 2004 (Thurs. AM)
- Science explorations** in Discovery Room, Ms. Christopher's room and hallway nearby May 22, 2004 (Sat. AM)

2002-2003 School Year

- Hands-on activities** and short workshop on static electricity Feb. 13, 2003 (Thurs. PM)
- Hands-on activities** and short workshop on light and color Apr. 26, 2003 (Sat. AM)
- Parent Involvement Day** building Science Celebration projects May 15, 2003 (Thurs. all day)

2001-2002 School Year

- Hands-on science night** in gym for families Oct. 2001 (Weekday PM)

5) Which Science Exploration Cards has your child(ren) done? To tell us, first look below for your child's grade this year. Under that grade is a list of cards he or she may have received since PPSS began six years ago. Please check ALL that your child did, either with you or with someone else.

Repeat this process for each child who has been involved in PPSS, checking cards listed under their current grade level. Then, move to question 6 on page 5.

What is a Science Exploration Card? These cards came in different shapes and sizes, but were usually on pink paper, and were often sent home as science homework. Each card focused on a science activity to be completed at home by your child and an adult. Often the cards included materials, like a slinky, flashlight, or measuring tape.

Is your child currently in **1st grade**? Check ALL cards he/she may have done in PPSS.

- | | |
|---|--|
| <input type="checkbox"/> Animals Around Us (<i>find animal-
compare to partner</i>) | <input type="checkbox"/> Floor Skating (<i>moving feet on surfaces</i>) |
| <input type="checkbox"/> Bean Sprouts (<i>growing sprouts in jars</i>) | <input type="checkbox"/> Leaves (<i>finding trees to match leaf
cards</i>) |
| <input type="checkbox"/> Finding Trees (<i>scavenger hunt of many
tree traits</i>) | <input type="checkbox"/> Listening (<i>to sounds around us</i>) |

Is your child currently in **2nd grade**? Check ALL cards he/she may have done in PPSS.

- | | |
|---|---|
| <input type="checkbox"/> Animal Game (<i>board game of habitats
and survival</i>) | <input type="checkbox"/> My Rock (<i>find and compare rocks</i>) |
| <input type="checkbox"/> Bean Sprouts (<i>growing sprouts in jars</i>) | <input type="checkbox"/> The Way Matter Settles (<i>shaking dirt,
sand, stones</i>) |

Is your child currently in **3rd grade**? Check ALL cards he/she may have done in PPSS.

- | | |
|--|--|
| <input type="checkbox"/> Air You Breathe (<i>hanging sticky cards
for dust</i>) | <input type="checkbox"/> Melting an Ice Cube (<i>melting race</i>) |
| <input type="checkbox"/> Animal Around Us (<i>find animal-
compare to partner</i>) | <input type="checkbox"/> Mobile (<i>using pencil, string, and paper
objects</i>) |
| <input type="checkbox"/> Animal Movements | <input type="checkbox"/> My Rock (<i>find and compare rocks</i>) |
| <input type="checkbox"/> Balance (<i>move objects from different
positions</i>) | <input type="checkbox"/> Noticing the Moon (<i>measuring with tape
measure</i>) |
| <input type="checkbox"/> Finding Insects (<i>find 2 outside and
compare</i>) | <input type="checkbox"/> Shadows (<i>paper doll and light</i>) |
| <input type="checkbox"/> Guess Who Game (<i>sorting by animal
characteristics</i>) | <input type="checkbox"/> Springtime (<i>explore shadows, buds,
sunrise</i>) |
| <input type="checkbox"/> Insect Sorting Game (<i>bug cards</i>) | <input type="checkbox"/> Watching Cars (<i>noticing car colors</i>) |

Is your child currently in **4th grade**? Check ALL cards he/she may have done in PPSS.

- | | |
|--|--|
| <input type="checkbox"/> Air You Breathe (<i>hanging sticky cards for dust</i>) | <input type="checkbox"/> Melting an Ice Cube (<i>melting race</i>) |
| <input type="checkbox"/> Balance (<i>move objects from different positions</i>) | <input type="checkbox"/> Mixing (<i>mixing liquids and powders</i>) |
| <input type="checkbox"/> Bead Bracelet (<i>sun-sensitive beads</i>) | <input type="checkbox"/> Mobile (<i>using pencil, string, and paper objects</i>) |
| <input type="checkbox"/> Bugs (<i>observe bugs</i>) | <input type="checkbox"/> My Rock (<i>find and compare rocks</i>) |
| <input type="checkbox"/> Everywhere (<i>place Post-Its on science</i>) | <input type="checkbox"/> Plants We Eat (<i>roots, stems, flowers, fruits</i>) |
| <input type="checkbox"/> Finding Insects (<i>find 2 outside and compare</i>) | <input type="checkbox"/> Slinky (<i>using containers to change sound</i>) |
| <input type="checkbox"/> Growing Crystals (<i>painting with Epsom salts</i>) | <input type="checkbox"/> Springtime (<i>explore shadows, buds, sunrise</i>) |
| <input type="checkbox"/> Guess Who Game (<i>sorting by animal characteristics</i>) | <input type="checkbox"/> Throwing (<i>tossing bean bags</i>) |
| <input type="checkbox"/> Leaves (<i>finding trees to match leaf cards</i>) | |

Is your child currently in **5th grade**? Check ALL cards he/she may have done in PPSS.

- | | |
|--|---|
| <input type="checkbox"/> Aerial Photos (<i>objects from sides and top</i>) | <input type="checkbox"/> Everywhere (<i>place Post-Its on science</i>) |
| <input type="checkbox"/> Animals Around Us (<i>find animal-compare to partner</i>) | <input type="checkbox"/> Finding Trees (<i>scavenger hunt of many tree traits</i>) |
| <input type="checkbox"/> Animal Sorting Game (<i>sorting by characteristics</i>) | <input type="checkbox"/> Heat (<i>electric items that make heat and light</i>) |
| <input type="checkbox"/> Bead Bracelet (<i>sun-sensitive beads</i>) | <input type="checkbox"/> Insect Guess Who |
| <input type="checkbox"/> Bugs (<i>observe bugs</i>) | <input type="checkbox"/> My Rock (<i>find and compare rocks</i>) |
| <input type="checkbox"/> Clothes in closet (<i>natural or human-made content</i>) | <input type="checkbox"/> Plants We Eat (<i>roots, stems, flowers, fruits</i>) |
| <input type="checkbox"/> Eating (<i>how jaw works</i>) | <input type="checkbox"/> Slinky (<i>using containers to change sound</i>) |
| <input type="checkbox"/> Electric Circuits (<i>board game</i>) | <input type="checkbox"/> Springtime (<i>explore shadows, buds, sunrise</i>) |
| <input type="checkbox"/> Erosion (<i>shaking, rubbing rocks</i>) | <input type="checkbox"/> Solid & Liquid (<i>creating descriptive terms</i>) |
| <input type="checkbox"/> Growing Crystals (<i>painting with Epsom salts</i>) | <input type="checkbox"/> The Way matter Settles (<i>shaking dirt, sand, stones</i>) |

Is your child currently in **6th grade**? Check ALL cards he/she may have done in PPSS.

- | | |
|--|---|
| <input type="checkbox"/> Air You Breathe (<i>hanging sticky cards for dust</i>) | <input type="checkbox"/> Heat (<i>electric items that make heat and light</i>) |
| <input type="checkbox"/> Animals Around Us (<i>find animal-compare to partner</i>) | <input type="checkbox"/> My Rock (<i>find and compare rocks</i>) |
| <input type="checkbox"/> Balance (<i>move objects from different positions</i>) | <input type="checkbox"/> Plants We Eat (<i>roots, stems, flowers, fruits</i>) |
| <input type="checkbox"/> Bead Bracelet (<i>sun-sensitive beads</i>) | <input type="checkbox"/> Springtime (<i>explore shadows, buds, sunrise</i>) |
| <input type="checkbox"/> Bean Sprouts (<i>growing sprouts in jars</i>) | <input type="checkbox"/> Throwing (<i>tossing bean bags</i>) |
| <input type="checkbox"/> Bugs (<i>observe bugs</i>) | <input type="checkbox"/> Watching Cars (<i>noticing car colors</i>) |
| <input type="checkbox"/> Everywhere (<i>place Post-Its on science</i>) | <input type="checkbox"/> Wetland Plant and Animals (<i>matching animal cards</i>) |
| <input type="checkbox"/> Guess Who Game (<i>sorting by animal characteristics</i>) | |

6) What do you remember most about doing these Exploration Cards with your child(ren)? If you have not completed any cards with your child, skip to question 7.

7) Since you started participating in PPSS, how many times have you...

...visited the Franklin Institute?

- 0 1 2 3 4 5+

...visited specifically for a PPSS event?

- 0 1 2 3 4 5+

...visited specifically for a school field trip?

- 0 1 2 3 4 5+

...visited on your own with your friends and/or family?

- 0 1 2 3 4 5+

...visited other museums or zoos?

- 0 1 2 3 4 5+

8) For each of the following questions, please indicate how much you agree with each statement by circling the appropriate number:

	☹						☺
	Strongly Disagree	-	-	-	-	-	Strongly Agree
	1	2	3	4	5	6	
PPSS has helped me to feel more comfortable in my child(ren)'s school.	1	2	3	4	5	6	
PPSS has helped me to better understand what my child(ren) does in school.	1	2	3	4	5	6	
PPSS has enhanced the ways in which I interact or communicate with my child(ren)'s teacher.	1	2	3	4	5	6	
PPSS has helped me to see how important it is for my child(ren) to learn science.	1	2	3	4	5	6	
PPSS has given me strategies for engaging my child(ren) in science at home.	1	2	3	4	5	6	
PPSS has encouraged me to talk more with my child(ren) about science at home or when we're out in the community.	1	2	3	4	5	6	

Tell us about your child(ren):

9) List all the children with whom you have participated in the PPSS program:

<u>Child's full name</u>	<u>Current grade</u>	<u>Your relationship to the child</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Tell us about yourself:

10) Are you: Male Female

11) How would you describe your family's race/ethnicity? Check ALL that apply.

- Black or African American
- Asian
- White
- Native American
- Other (Please specify): _____

Are you also Hispanic or Latino/a?

- Yes No

12) What is your educational background?

- Some schooling
- High school graduate
- Some college classes
- Technical degree
- Associates Degree (AA, AS)
- College graduate (BA, BFA, BS)
- Some graduate school classes
- Graduate school degree (Masters, PhD)

13) What language do you and your family most often speak at home?

- English
- Spanish
- Chinese
- Other (Please specify): _____

Thank you for your help!
Please return this survey to your child's teacher.

Appendix B



222 North 20th Street
 Philadelphia, PA 19103-1194
 Phone 215.448.1092
 Fax 215.448.1219
<http://www.fi.edu/ppss>

May 28, 2008

Dear Parent/Caregiver,

You are invited to participate in a research project on the role of museums in encouraging parent involvement in their children's schooling. I am extending this invitation to you because you were involved in the *Parent Partners in School Science* program, a partnership between your child's school and The Franklin Institute Science Museum, implemented from 2001-2006. If you agree to participate, you will be asked to take part in two interviews about your *PPSS* experience, both scheduled at your convenience. In return for your participation, you will receive a \$25 American Express gift card.

Please complete the bottom portion of this letter and return it to your child's teacher. By providing your contact information, you are simply agreeing for me to call or email you to talk further about the study; you are not agreeing to participate in the study at this point. If you have any questions, please feel free to contact me at luke@ilinet.org or (443) 822-9678. Thank you and I look forward to talking with you.

Sincerely,

Jessica Luke
 Doctoral Candidate, University of Maryland, College Park

***PPSS* Parent Involvement Research Study**

Your Full Name: _____

Yes, you may contact me to talk further about this study No, you may not contact me

Phone: _____

Email: _____

Appendix C

Page 1 of 2
Initials _____ Date _____**CONSENT FORM**

Project Title	<i>Reframing Parent Involvement: Exploring the Role of an Intermediary Organization in Connecting Parents and Schools</i>
Why is this research being done?	This is a research project being conducted by Jessica Luke and Judith Torney-Purta at the University of Maryland, College Park. We are inviting you to participate in this research because you were involved in the <i>Parent Partners in School Science</i> program, a partnership between your child's school and The Franklin Institute Science Museum, implemented between 2001-2006. The purpose of this research is to better understand the role that a museum can play in bringing parents and schools together in support of children's learning.
What will I be asked to do?	<p>If you agree to participate, you will be asked to take part in two interviews; both will be scheduled at your convenience. The first will be held in a place of your choosing (i.e., your house, a local coffee shop), and will last approximately 60 minutes. The researcher will ask questions about what you remember from your participation in <i>Parent Partners in School Science</i>, and the ways in which you think the program may have had an impact on you. A typical interview question might be "Did <i>PPSS</i> provide you with strategies for connecting with your child's school and their education?"</p> <p>The second interview will be held at The Franklin Institute Science Museum. It will last 90 minutes, and will involve a group of parents who participated in the <i>Parent Partners in School Science</i> program. You will be served dinner, and asked to reflect upon research findings from the first interviews in order to validate the ways that we have interpreted your comments. A typical group interview question might be "Do these findings generally describe your own experiences with the program?"</p>
What about confidentiality?	<p>This research project involves making audio recordings of your comments during interviews. Recordings will be made using a digital recorder, and the audio file will be downloaded to Jessica Luke's computer. We will do our best to keep your personal information confidential. Jessica's computer is password protected, and only she has access to it. Audio files will be for Jessica's use only.</p> <p><input type="checkbox"/> I agree to be audiotaped during my participation in this study. <input type="checkbox"/> I do not agree to be audiotaped during my participation in this study.</p> <p>If we write a report or article about this research project, no names or identifying personal information about those who were interviewed will be included. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.</p>

Project Title	<i>Reframing Parent Involvement: Exploring the Role of an Intermediary Organization in Connecting Parents and Schools</i>	
What are the risks of this research?	There are no known risks for subjects participating in this project.	
What are the benefits of this research?	<p>This research project is not designed to help you personally, but it may offer you an opportunity for the following potential benefits:</p> <ul style="list-style-type: none"> • Chance for you to reflect upon your involvement in your child's schooling, and any benefits that have resulted; • Chance to share/learn from other parents in terms of involvement practices. 	
Do I have to be in this research? May I stop participating at any time?	Your participation in this research project is completely voluntary. You may choose not to take part at all. If you decide to participate in this research project, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits for which you otherwise qualify.	
What if I have questions?	<p>This research project is being conducted by Jessica Luke and Judith Torney-Purta at the University of Maryland, College Park. If you have any questions about the research study itself, please contact Judith Torney-Purta at: Department of Human Development, 3304 Benjamin Building, University of Maryland, College Park, MD 20742; (telephone) 301-405-2806; (email) jtpurta@umd.edu. If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-0678</p> <p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p>	
Statement of Age of Subject and Consent	<p>Your signature indicates that:</p> <ul style="list-style-type: none"> • You are at least 18 years of age; • The research has been explained to you; • Your questions have been fully answered; and • You freely and voluntarily choose to participate in this research project. 	
Signature and Date	Name of Subject:	
	Signature of Subject:	
	Date:	

Appendix D

Rethinking Parent Involvement Study Initial Interview Guide

Administering the Interview

The following interview guide will be administered using a semi-structured interview approach (Patton, 1990). Within this approach, the interviewer starts by asking the questions in the order in which they are listed; however, where the participants' response relates to another interview question, the interviewer shifts to that question, asking follow-up probes until that question has been answered. The interview becomes more of a conversation, with the interviewer asking the questions listed, but in the order that makes sense given the participants' responses. In this way, it is possible that the interviewer may not need to proceed through this entire guide, since the first set of questions may actually illicit the information desired in the second set of questions.

Part I: Parents' participation in *Parent Partners in School Science (PPSS)*

The first set of questions are about your participation in a parent involvement program called *Parent Partners in School Science (PPSS)*. *PPSS* was a collaboration between your child's school and The Franklin Institute Science Museum, consisting of various events and activities offered from 2001 through 2006. I know it may have been a long time ago, but please think back to your participation in *PPSS*.

1. Tell me what you remember about the program.

Potential follow-up questions:

- What is your most vivid program memory?
- Can you remember other program details, objects, or specific things you saw in the museum?

2. Why did you get involved in the program?

Potential follow-up questions:

- What was going on in your life/child's life at the time?
- How old was your child?

3. What did your child like best about the program?

Potential follow-up questions:

- Why did you think your child liked that best?
- Why did your child NOT like about the program? Why?

4. What did you, as a parent, like best about the program

Potential follow-up questions:

- Why did you like that best?
 - What did you NOT like about the program? Why?
5. Each year there were activity cards that went home from your child's school, called Exploration Cards. Each card asked parents and children to engage in a fun, easy-to-do science activity together at home. Did you and your child do these activities?
Potential follow-up questions:
- Was there anything particularly memorable about these activities?
 - Have you done any of the activities since? If yes, which ones? Why? If not, why not?
6. The program also involved events that were held at your child's school, called Discovery Days. These were hour-long workshops where you and your child could experiment with various science activities. Did you and your child attend any of these events?
Potential follow-up questions:
- Was there anything particularly memorable about these events?
7. Also, your child's school created [insert name of legacy project] as a result of the *PPSS* program. Have you been involved in that at all? If so, in what ways?
Potential follow-up questions:
- What prompted you to become involved in this project?
 - What has been most beneficial/useful about it for you as a parent?
8. Have you participated in any other parent involvement programs/workshops in the last 3 years? If yes, please describe them.
Potential follow-up questions:
- Why did you decide to participate in this/these programs?
 - What was the purpose of the program? What did you get out of it?
9. How were you involved in your child's school and their education before you started participating in *PPSS*?

Part II: Parents' perceptions of the role that *PPSS* played in facilitating their involvement with their child's school & their education

The next set of questions are about your perspectives on how participating in *PPSS* may have influenced the ways you have been involved with your child's school and their education.

1. Thinking back to before you started participating in *PPSS*, would you say that now you are more involved, less involved, or involved about the same in your child's school and their education?
Potential follow-up questions:
- Give me an example of how you are [more involved/less involved].

- What caused the change in your involvement? [only ask if parents indicate more involved or less involved]
2. How, if at all, did your participation in *PPSS* influence or change the ways in which you are involved in your child's school and their education?
Potential follow-up questions:
 - What exactly has changed? Frequency of involvement? Nature of involvement?
 - What have those changes meant to you?
 - How exactly did they happen? Were there particular activities, events, or people that contributed to these influences?
 3. Can you think of examples of how *PPSS* has changed your relationships with staff at your child's school? With parents of other children at your child's school?
Potential follow-up questions:
 - What exactly has changed about those relationships?
 - What has that change meant to you?
 - How exactly did it happen? Were there specific activities, events, or people that contributed to these changes?
 4. Has *PPSS* changed the way you feel about your child's school?
Potential follow-up questions:
 - What exactly has changed about your feelings?
 - What has that change meant to you?
 - How exactly did it happen? Were there specific activities, events, or people that contributed to these changes?
 5. Tell me how you are involved in your child's school and their education now.
Potential follow-up questions:
 - Did *PPSS* have anything to do with [different forms of involvement that exist now but didn't before]?
 6. Did *PPSS* provide you with strategies for connecting with your child's school and their education?
Potential follow-up questions:
 - Describe those strategies. How exactly have you used them?
 - What has been the result of these strategies/connections? How have they worked for you?
 7. Did *PPSS* help you to overcome any problems or obstacles you had in terms of being involved in your child's school and their education?
Potential follow-up questions:
 - How exactly did it do that? Can you give me an example?
 - Do you think you would have overcome that obstacle if you hadn't participated in *PPSS*?

8. Did *PPSS* create any problems or obstacles in your involvement with your child's school and their education?

- Can you describe those problems/obstacles?

9. What are the most important things you have learned through *PPSS* about being involved in your child's school and their education?

Potential follow-up questions:

- How would you describe those lessons to other parents who haven't participated in the program?
- What have these lessons meant to you? How have you acted on them?

10. Is there anything else you think I should know in order to understand how *PPSS* has helped parents to be involved in their child's school and their education?

11. Is there anything else you would like to share with me?

Appendix E

Parent Interview #3**July 24, 2008**

Jessica: Are you there?

K: Yes, I am.

Jessica: Thank you so much.

K: You're welcome.

Jessica: Okay. Now first things first, as part of – I'm doing this study as part of my dissertation at the University of Maryland and although you signed a consent form, let me just review it.

It's important that you understand that as part of this interview you can stop it at any point. You don't have to answer any of the questions that I pose if you don't want to or don't feel comfortable.

K: Okay.

Jessica: And when I do write up the data your name will never be used within the report as attached to what you tell me.

K: Okay.

Jessica: All right. Thank you. Okay. So let's dive in. You remember that this interview is about your participation in Parent Partners in School Science.

K: Yes.

Jessica: And that was a number of years ago I know now and it was when – I think your child is no longer at [REDACTED], correct?

K: She just graduated from [REDACTED] and she's going to high school.

Jessica: She is?

K: Ninth grade, yeah.

- Jessica:* Wow, so she's going into grade nine?
- K:* Yes.
- Jessica:* Wow, yeah. Okay. So it was I'd say maybe even five or six years ago that you started participating in this program, so I know a lot of time has passed but –
- K:* It doesn't seem that long ago.
- Jessica:* -- what I'm really interested in – sorry?
- K:* No, I said it doesn't seem that long ago.
- Jessica:* Oh, really?
- K:* Yeah. *(Laughing.)*
- Jessica:* *(Laughing.)*
- K:* Been busy.
- Jessica:* Yeah. Yeah, time flies, doesn't it?
- K:* Yeah.
- Jessica:* What I'm really interested in is understanding whether or not you think that program had any impact on you and if it didn't, that's okay. That's okay. I'm interested in that too.
- K:* Okay.
- Jessica:* My first set of questions are about your memories of the program, just trying to get you thinking again about the program and what it is you did. So tell me what you remember about Parent Partners in School Science.
- K:* I guess the thing that sticks out the most is – you know – the membership to the Franklin Institute and just going there with here and having that experience. Can you hear me okay?
- Jessica:* Yeah, there's a bit of static but I think it's okay.
- K:* Yeah. I didn't know whether – it just came all of the sudden.
- Jessica:* Can you hear me?

K: Yeah. But that, the Franklin Institute and going there with her. I mean we went on some Saturdays with the class and all. It's just nice to take that time. I mean I do things with my kids but I just thought that was nice that the school was sponsoring something like that and also I think they did the – like the cards, like the little science cards, wasn't that involved in that too where you had to go --

Jessica: It was. Yeah, they were called exploration cards.

K: Yeah. Yeah, the exploration cards and do things. It's – you know like pick up rocks and you know maybe something that you – you might have done with your kids but it was just – it was just nice having those questions there and looking at it from another angle that I might not have maybe asked those questions or whatever and I know she enjoyed it.

Jessica: What do you think she liked best about the program?

K: I think probably going to the Franklin Institute (*Laughing.*). They were always there.

Jessica: Why do you say that?

K: Just because they always liked to go and – you know they – it's just a place where they had fun.

Jessica: Yeah.

K: They just had a good time and – you know and then –

Jessica: Yeah.

K: -- probably you know spending the time with me and just her and I exploring things together, you know.

Jessica: As part of a program you received a membership to the Franklin each year. Is that right?

K: Yes, we did.

Jessica: And it sounds like you used it?

K: We did, yeah. We went a lot.

- Jessica:* You did. You did. What's a lot? How many times do you think you went in a year?
- K:* In a year I'd probably say like three times.
- Jessica:* Wow.
- K:* Which is pretty good for us –
- Jessica:* Okay.
- K:* -- because for – I have five children and for us to all go it would be impossible. You know just the –
- Jessica:* You have five children?
- K:* Yeah, the financial end of it and everything. You know?
- Jessica:* Yeah.
- K:* So –
- Jessica:* Yeah.
- K:* You know I went with her on a couple of different occasions with school and then I probably went twice with the rest of the family, maybe once or twice with the rest of the family. So it was a good thing.
- Jessica:* Now K, how old are your other kids?
- K:* Well now they're – my oldest is 22. 18 – no, 19. I'm sorry. She just turned 19. They're all turning, 17, 14 and 7.
- Jessica:* Wow.
- K:* Yeah.
- Jessica:* That's quite a range.
- K:* Yeah, Maria is 14 now.
- Jessica:* Now when you say that you went about three times a year to the Franklin do you mean that you went as part of the PPSS activities? So like taking a bus with a bunch of other people from [REDACTED] or were you going on your own as a family?

K: Well I think we went on our own too as a family. Like we might have went – I think the opportunity to go was maybe twice a year with [REDACTED] and I think the first year we did take advantage of that and then because we had the membership we were able to go with the rest of my kids too, you know?

Jessica: Okay.

K: Yeah. So we probably went once or twice. I can't even recall but it seemed like I know we were there a lot more – like that I haven't gone with my son probably in maybe a year or two and – you know if I had that membership I would use it probably.

Jessica: Yeah, yeah.

K: I would definitely use it.

Jessica: Now think back to when you first started participating in this program, and again I know it was a long time ago. Do you remember why you decided to get involved in Parent Partners in School Science?

K: I just – I think it's good. I think when a school offers something like that you should take advantage of it and the kids – you know – for the kids sake particularly, just you know for their knowledge and – and you being involved in it with them I think should – that's a good example.

Jessica: Okay. What did you as a parent like best about the program?

K: I think – I think that it – that it actually made me take that time with my kids and I know how important the time is for the aspect of learning and I just – I think that was my favorite part, just being with my kids and having fun at the same time and they're learning.

Jessica: Okay. Were there other opportunities that you had at that point to do that outside of this program?

K: Outside of the program? You know what I'm trying to – I'm trying to think what –

Jessica: And please tell me if you need to deal with – with the little one that I can hear in the background.

K: Yes. I just – I just spotted her.

- Jessica:* Feel free to put the phone down at any point.
- K:* (*Laughing.*) I'm just going in and eyeballing her. She's like stretching and groaning. She's only four weeks today. So –
- Jessica:* Oh, my gosh.
- K:* Yeah, she's a sweetheart. But yeah, I guess there was other times but you know like I think sometimes when say it doesn't involve school, you kind of put it off.
- You think oh, I should take them to the Franklin Institute, I should take them to the zoo, you know, and well, the bus is going from school, let's do it now, you know or – and the kids want to go because their friends are going from school and – you know so you get together with the other parents or whatever were going.
- You know so in that way I think – I'm trying to think of other – I mean I'm sure I did other things with her at the time like taking her different places but – you know – I think I concentrated more on that and then I felt like I was – I was getting involved with it and at least I had that time, you know, to – what am I trying to say?
- At least I had that time to spend with her and we were as a family or whatever. You know?
- Jessica:* Okay. Yeah, yeah. So you talked a little bit about remembering the exploration cards that went home. Do you remember any one particular activity?
- K:* I think it was the rock one. Wasn't there a rock –
- Jessica:* Yeah, yeah.
- K:* Yeah. That was the one I remember the most because she was into the shininess of the rock and – you know – I just remember that one mostly.
- Jessica:* Okay. Anything else that was memorable about those activities for you?
- K:* That I can remember right now probably I can – or you're going to have to refresh my memory or is it just – (*Laughing.*)
- Jessica:* No. It's not even really – you know it's certainly not a test. I'm just curious to know whether or not there was anything really salient about those and maybe there wasn't. That's okay.

- K:* Yeah. I know there were some and I can't – I just remember doing the cards and I thought well, these are good for her. I'm sure if I asked her, she would definitely remember them because –
- Jessica:* Okay.
- K:* -- my age is (*Laughing*) giving me away.
- Jessica:* Yeah, I hear you.
- K:* Yeah (*Laughing.*)
- Jessica:* There were also events that were held at [REDACTED] called "Discovery Days" and they were hour-long workshops usually held on the weekend where you and your child could experiment with various science activities. Did you guys attend any of those?
- K:* I think we did. I think it was in the gym –
- Jessica:* Yeah.
- K:* -- and they had – I guess – I think it was a Tuesday night. They had different things going on science-wise and like kind of games and things that they played.
- Jessica:* Yeah.
- K:* Yeah.
- Jessica:* Yeah, yeah.
- K:* Yeah, we did. We went to a couple of them.
- Jessica:* Okay. Anything – anything really memorable about those?
- K:* Let me see. Memorable in like a sense do I remember a specific activity or –
- Jessica:* Yeah. Yeah, or doing anything specific or feeling anything specific?
- K:* You know what I can't – I can't even remember anything that doesn't stick out in my head.
- Jessica:* That's okay.

- K:* I just remember being there and doing the games and just different things like that with her.
- Jessica:* Yeah, yeah. Now [REDACTED] also has a Legacy project that's a result of Parent Partners and School Science, a garden that was created.
- K:* Oh yeah, okay.
- Jessica:* Yeah. Did you participate in that at all?
- K:* No. No, I didn't. I was always going to – in fact they had something about for the summer ordering the garden, I was going to sign up for it but we didn't – we didn't get involved in that one.
- Jessica:* Yeah, your life just took over. I get it, yeah.
- K:* Yeah, Maria might have. I don't know if it required the parents for that one.
- Jessica:* No, I think there were probably multiple different ways that parents and kids could participate. So –
- K:* Yeah.
- Jessica:* And I think Dr. Schumer had some activities through the classes that involved the kids and the garden.
- K:* Yeah. Yeah, I think she might have. I remember – I think Maria was involved in something at the very beginning you know when –
- Jessica:* Okay.
- K:* -- you know going out –
- Jessica:* Okay.
- K:* -- and I think they watered or we did the garden. Yeah.
- Jessica:* Okay. Now have you been involved in any other parent involvement sort of programs? Anything that's similar to Parent Partners in School Science over the last few years?
- K:* No, I really haven't.
- Jessica:* No? Okay.

- K:* We were so – I mean like I – you know – I don't know. I just – I liked that program. My younger son is in that school now.
- Jessica:* At [REDACTED]?
- K:* Yes. Yeah, I really haven't done anything. I mean I'm trying to think where – I'm trying – he was in kindergarten and there was something. I don't know if that wasn't through the Franklin Institute though. I'm remembering if it was –
- Jessica:* Oh, it might have been because the Franklin did actually extend the program to kindergarten in its last year so it's possible that might have captured him at the time.
- K:* Yeah. It didn't involve the food end of anything, right? That's not the Franklin Institute. That's the nutrition thing?
- Jessica:* No.
- K:* Yeah.
- Jessica:* No.
- K:* That's nutritional.
- Jessica:* And does the nutrition thing involve parents or just kids?
- K:* Oh yeah, it did. I went in for kindergarten for him but it wasn't Maria. It was – you know you go in and they do – make different kinds of fruits and vegetables. They're trying to push the five fruits a day and five vegetables a day.
- Jessica:* Oh, I see. Okay.
- K:* I did involve myself in that also.
- Jessica:* Okay. And what did you do for that specifically? You went into the classroom?
- K:* Yeah, and you help your child. Like they'll make different – say like celery and cream cheese and they'll put raisins on it. They'll make it look like witches' fingers. The raisins are the – you know the fingertips and just different things to get them interested in eating, and there was one woman there, she had like brownies and

- there was spinach in there, and she was trying to make the kids guess what could be in there and if they liked it, you know.
- Jessica:* Okay.
- K:* So they could taste it and say, “Oh, they’re good.” You know and she said, “Well, guess what’s in there?” And you know and when she finally said, “Spinach,” they were like, “What?” (*Laughing.*) Tastes too good, you know?
- Jessica:* Yeah.
- K:* So –
- Jessica:* Yeah.
- K:* Yeah.
- Jessica:* Okay. So my next set of questions are about what we discussed earlier in terms of impact and the ways in which you think that participating in Parent Partners in School Science or PPSS for short may have influenced the ways that you have been involved with your child’s school and their education.
- K:* Okay.
- Jessica:* And I’m thinking specifically about Maria.
- K:* Yes, Maria.
- Jessica:* Specifically about her but also ways that it might have sort of bubbled over into how you’re involved now with your younger son or anything like that.
- K:* Okay.
- Jessica:* Again, you should feel free to say that none of this stuff impacted you. That’s okay.
- K:* Okay.
- Jessica:* Here’s my first question. Thinking back to before you started participating in PPSS and then thinking about where you are now, would you say that you are more involved, less involved, or involved about the same in your kids’ school and their education?

- K:* I would say probably I'm involved but I think that it's helped me to be more involved when they had – they sent him the little cards and just the encouragement in going to the museums together and all of that. Probably – I was probably a little bit more involved when – when they had that.
- Jessica:* Okay. And don't let me put words in your mouth but – but you said when they sent the little cards home and encouraging you to go to the museum together. What was it about those things that got you more involved?
- K:* Like don't get me wrong. I – you know – I help my kids with their homework, I read with my son and – you know – now Maria is a little bit more independent but when she was younger, you know, I always worked with them and did projects with them and what-not but it was – it wasn't like one of those things where you had to do it and she – she wanted to do it.
- So it was – it was fun for her. It wasn't like a project that was due by a certain date or anything. You know, so it was just a fun thing. You know, she knew that – that she was – you know that she had – like she kind of had to do it but it wasn't – I don't know. This wasn't like a mandatory or pressure type thing. You know what I mean?
- Jessica:* So how does that make it different for you as a parent in terms of your involvement?
- K:* I don't know. I just – it just – the kids are like a little less – like it's you don't really have to pull teeth to get them to do it. They just –
- Jessica:* Yeah.
- K:* -- kind of want to do it with you and – you know – it's not – you know something where you're arguing with them and saying, "Come on, you have to get this homework done," or whatever. It's something fun.
- Jessica:* Well what does that mean – what did that mean to you at the time?
- K:* You know I just – I don't know. I just appreciate it and I liked it because it's easier for me as a parent to – to teach them through that, you know, or point out something to them and – you know – and not have that resistance.

- Jessica:* Yeah, yeah. That's interesting. That's very interesting. What about going to the Franklin together? Was that the same as or different from other ways that you were involved with your kids?
- K:* You mean during the Parent Plus program or just –
- Jessica:* Yeah.
- K:* -- as a –
- Jessica:* Yeah.
- K:* -- as compared to not during the Parent Partners program?
- Jessica:* Well I guess I'm thinking – you know you said that you felt that during the program you were maybe a little bit more involved with your kids, that clearly you do stuff with them and did stuff with them at that time but that possibly the program gave you some different ways of being involved?
- K:* Yeah. They won't – because like just for instance now like I know my son would love to go to the Franklin Institute but for me to pay whatever it would be for him and I and my husband to go, because my other kids probably aren't interested. Maria might want to go but it's just I have other things on my plate and it's just a big expense that I can't do right now. So –
- Jessica:* Yeah.
- K:* -- you know if I could go down there with – he would love it you know and try to teach him some things through that. I don't know if we've lost track of the question. I'm sorry. *(Laughing.)*
- Jessica:* No. No, no. No, I think maybe it was a tough question. Let me – let me ask a different one. Do you think that participating in PPSS has changed your relationships with staff at your child's school? Either then when she was still going to [REDACTED] or with your younger son now that he is still at [REDACTED] or with other teachers?
- K:* Well I think – yeah. I think they like going. It's also on the teacher's part it was voluntary and they were going on their day off. So – you know – they would have to want to go, you know, because they're volunteering their time and – I know like a couple of the teachers that went, you know you're relaxed, it's not during school. You're – you know just out to have a nice day and so it's –

I guess it would be a different relational thing with the teachers. It would have changed it and made it nicer.

Jessica: Okay. Okay. What does that mean to you? What –

K: Now that's interesting.

Jessica: Does that have any sort of impact on you or not?

K: Yeah. Yeah, it's important because you want to – you want to know the people that your children are with a good part of the day, you know, seven hours a day or eight hours a day or, you know, interested in that and – and it's just a nice feeling to know that you're sending your child to that type of place and – you know rather than –

Jessica: Yeah. Do you think that you got to know them differently through this program?

K: Yes.

Jessica: In what way?

K: I guess in a positive way it was more – it became more like a – you know I guess you're a little bit more familiar with them than say somebody that didn't volunteer and it just made – it made a positive influence I think on the child and – and the other parents sending them to a place where they care enough to – to volunteer and do something like that on their day off and – you know – you look up stuff.

Jessica: Can you think of a specific example?

K: I think just the fact that – I know that – that the teacher – I don't know. There was a computer teacher Mrs. Brady and she – I think she went on every one of the things, you know, and just had a very nice personality and I was just thankful that she would do something like that.

Jessica: Do you think that participating in Parent Partners in School Science changed the way you felt about your child's school? And again about [REDACTED] at the time or about the school that she's at now?

K: Yeah. Yeah, I have a very good opinion about [REDACTED] School. I sent my other kids to a Catholic School and I have a better opinion

about [REDACTED] and it probably has a lot to do with that program and – and just the school in general. You know I think – I think it had a lot to do with just – you know we would do things on Saturday. I didn't do anything with really on weekends or anything at my other kids' school.

Jessica: Okay. So being at the school on Saturday, how did that change the way you felt about it?

K: Yeah, in the evenings just having some place for them to go. It's something that's not costing you and at the same time they're learning. I just – I think it's a good – you know – I mean the only – the only thing that my other kids' school had was dances and they would charge them seven or eight dollars which is fine. I don't mind paying that and it's a nice thing that they can go to a dance but this is a learning experience and at the same time it's an outing, a social outing for them and –

Jessica: Yeah. Yeah, that's interesting. So – so let me ask you when you did this program, Maria was in the sort of younger grades at [REDACTED] and now that you're – now she's moved on and now your younger son is still at [REDACTED]

K: Yeah.

Jessica: Do you think that – that any of the ways that – so you said that you now feel differently about [REDACTED] as a result of participating in this program. Has that had any sort of impact on the ways that you've been involved in your younger son's education or learning?

K: Well if they had –

Jessica: Or his life at home?

K: Right. If they had something like that again, I would definitely participate in it. You know like I told you probably there was nothing really other than the [REDACTED] the park, you know I didn't – I really didn't get involved in that end of it but I – I would definitely do something like that again, you know and I try to get him – if they send him anything extra I try to get him to participate in that and get involved in that. I definitely would.

Jessica: Do you – you talked a little bit about getting to know some of the teachers a little bit better through this program. Has that had any impact on the ways that you've been involved in your youngest son's education at [REDACTED]?

- K:* Yeah, I think so. I feel very comfortable there and I don't know – you know I just – the teachers are very approachable and open to whatever, improving and helping out in their education and learning.
- Jessica:* Do you think you would have felt that comfortable even if you hadn't done Parent Partners in School Science? I mean is it just something that would have happened with time, having enough of your kids go to [REDACTED] and getting to know people better?
- K:* I don't – I'm not sure. I'm not sure.
- Jessica:* Okay.
- K:* I really don't know. It might have over time but I think because it was my first student in there and I – you know – when you're there frequently and you're going at night – I guess we were involved in – I forgot there was this thing we were involved in the reading nights too. They would have – they would open for reading nights and – you know – read them a story and things like that.
- So I think the more you're probably around the school and the teachers and you see that – you know – their basic interest is for the kids and it helps. So I'm going to say I think probably through – through – you know it started with the Franklin Institute and their cards and going to the Franklin Institute and having the science nights and it just – it just helps you to feel more comfortable I guess.
- Jessica:* Okay. Okay. Do you think that participating in PPSS had any impact on your relationships with the parents of other kids at [REDACTED]?
- K:* Oh, yeah. Yeah, I definitely think it does.
- Jessica:* Okay. Tell me how.
- K:* Just as for instance I got to meet a lot of the parents at – Maria, you know, they're her friends and with Michael we really haven't been doing much as far as that goes, you know as far as the – now I know some of the parents from Michael – you know just maybe from going in for the nutrition thing and you get to know them but I think Maria it was a little bit more – more familiar. We became more familiar with the parents.

- Jessica:* Okay. And what does that mean to you as a parent? I mean is it important to be more familiar with the other parents?
- K:* Yeah, because you know you want to know the – that they're interested in their children's education. Your kids are – you know – going to the same school and becoming friendly and hanging out with them and you just want to know that – you know that they have like almost the same values and want the same for their kids.
- Jessica:* Do you think that Parent Partners in School Science gave you any strategies for connecting with your child's school or with their education?
- K:* Strategies like?
- Jessica:* Like ways to get involved that you might not have had otherwise?
- K:* Yeah.
- Jessica:* Okay.
- K:* Yeah because –
- Jessica:* Tell me more about that. I'm sorry. Tell me more about that. The sound you're hearing now is the car alarm. My –
- K:* Oh, okay.
- Jessica:* -- two – upstairs.
- K:* Yeah.
- Jessica:* He's done. Okay. (*Laughing.*) So sorry, let me repeat that. Do you think that Parent Partners in School Science gave you any strategies or ways that you could connect with your child's school and with their education that you might not have had otherwise?
- K:* Yeah. I definitely think it did. I just – I mean if we didn't have – if we didn't have that and we weren't going down on the bus together and doing different things like that I don't know that I would have met as many parents and the teachers and just began to communicate with them in different ways than if you're just dropping your child off at school and they get in a line and you take off. There's so many people –
- Jessica:* How is that communication different?

K: Because you're just meeting the teacher for like maybe a couple of sessions a year just to get the report card and talk to her, how is his progress, you know, or her progress?

And when you are on like a social outing it's – it's just more relaxed and you get to know them in a different way and – you know – I think you're open to a little bit more and I think it makes it a little bit more relaxing for the child to know that – you know – they're doing something with their teacher on an on and off time.

Jessica: Okay. Did Parent Partners in School Science help you to overcome any problems or obstacles that you had in terms of being involved in your child's school or their education?

K: I don't think so. I don't – not that I can recall right now.

Jessica: Okay. Did it create any problems or obstacles for you?

K: No, no.

Jessica: No. Okay. Now let's see, I'm trying to think about how to ask this question. Do you – you've talked a little bit about some really interesting ways that for you the program had an impact. You've said that it helped you to get to know the teachers better and in a different way.

It helped you to communicate with them differently about your kids. It helped you to get to know parents of other kids at [REDACTED] better and that that was important to you, and that it helped you feel just more comfortable with [REDACTED].

Did – did all of that go away once the program stopped or do you think that any of those impacts have stayed with you?

K: I don't know because I – I kind of – I think I see like a little bit of a difference with Michael and I kind of wish that they had that again because you spend a little bit more time.

I just think like when I went in for the nutrition thing for Michael in kindergarten it kind of reminded me of the Parent Partner thing. It just – it reminded me of that and it just – it relaxes the teacher, it relaxes the kids and the parents and it's just something – just something fun to do.

- Jessica:* Okay. Do you think that you've been in the school as much while Michael has been there as you were when Maria was there?
- K:* No.
- Jessica:* You haven't?
- K:* No.
- Jessica:* Do you think that has to do with the PPSS?
- K:* Yeah.
- Jessica:* Okay. Okay. So there just haven't been as many opportunities to be in the school with Michael –
- K:* Right.
- Jessica:* -- now that the program isn't there?
- K:* Yeah. Yeah, I –
- K:* Okay.
- K:* -- believe that's right. I – you know – I still have the reading nights and things like that but I just haven't – I don't know. I didn't really get in for them too much and I was definitely there more when Maria was in.
- Jessica:* Okay. Okay. Do you think – I mean Maria is older. She's in a different school now and going into yet another different school, right?
- K:* Yes.
- Jessica:* Do you think that any of the – the impacts from PPSS have changed the way you have been involved with her at these other schools? With her teachers at other schools?
- K:* That's a tough question because –
- Jessica:* Are there good ones?
- K:* -- I don't really care – I don't care for the other schools so I just kind of –

- Jessica:* Oh, that's too bad.
- K:* Yeah, I kind of distanced myself.
- Jessica:* Yeah.
- K:* I didn't want her to go really to that school so I kind of distanced myself from it and – and now she's going to high school and they kind of – you know how they get. They don't want you to really be too involved in that. They don't want to –
- Jessica:* Right, they don't want you doing anything with them.
- K:* Exactly, assert their independence. I tried with my other daughters. I said, "I'll go volunteer and," you know they need some volunteers and, "No, that's all right." (*Laughing.*)
- Jessica:* (*Laughing.*)
- K:* Don't show your face, you know. Don't embarrass me but so I – at that age I kind of back off. So I probably should do something else where they're – I'm not in their face or whatever, not involved in that aspect of it but I just – you know with having the other kids it's just been – you know – five kids and I have a full plate here.
- Jessica:* Yeah. Yeah, I hear you. Okay.
- K:* Yeah, I should go.
- Jessica:* So it sounds like it had an impact on you when it was there and at [REDACTED] but that now that the program is over and your kids have moved on that that impact hasn't necessarily stayed with you?
- K:* Yeah. I guess I feel impacted by it. I felt like it was good during that time and –
- Jessica:* Yeah.
- K:* -- if they – you know if there's another program that interests me that much I will get involved in it but you know I – I really haven't been. I don't –
- Jessica:* Okay.
- K:* That's just the way it is.

- Jessica:* Okay.
- K:* I don't know why but –
- Jessica:* No, no. Now K was there something unique about Parent Partners in School Science compared to other sorts of things that you do or was it pretty much similar to a lot of the other ways that you're involved with your kids?
- K:* No, it was unique. I – because I don't really – I've never been involved in too much. So I guess it was unique and I liked it. So –
- Jessica:* So what do you think made you get involved in that? I mean you've got five kids. You sound crazy busy to me and I'm sure that there are a lot of – a lot of things that come home from the school and a lot of requests for you to get involved that – you know likely – like me, I have great intentions but don't necessarily do them all.
- K:* Right.
- Jessica:* What made you do these things for PPSS? Why?
- K:* Well because I – I like the Franklin Institute and I guess the initial thing was that they give you the – the pass for the museum.
- Jessica:* Okay. So that was important to you?
- K:* Yes and –
- Jessica:* Yeah.
- K:* -- I know the kids like it and I already spoke to you about the financial end of it and –
- Jessica:* Yeah.
- K:* -- so that makes it easier. So that, that can grab my attention and then more than I was committed to doing the cards and all that I felt like okay, well, I said I'm gonna do this and we're gonna see it through and – and like I said she didn't mind doing it. So it just came very easy and then she would come home, "They're having a trip to the Franklin Institute on Saturday, do you want to go?" And I'd be like, "Yeah, it's good. We'll spend the day together and you can be with – hang out with your friends and have fun and show –"

- Jessica:* What do you think you got out of doing those cards together?
What sort of an impact did those cards have on you?
- K:* Well I guess the closeness of working together with your child and like the –
- Jessica:* But you do that through homework, right? How is that any different?
- K:* Well because they said the homework is something they know they have to do and the cards, I guess you know it was presented to them in a way where like oh well you have – try to get this done. I think that's the way they put it through to them because I never felt the pressure and neither did she of getting them done and you know – and she always liked being outside.
- So I think most of them moved outside. I'm not sure if there was one with leaves or something. I'm trying to remember but I felt like a lot of them involved the outdoor stuff.
- Jessica:* Yeah. Yeah, and you guys liked that?
- K:* And – yeah. Yeah. I think it's always good to be –
- Jessica:* Okay.
- K:* -- yeah. So you know when you're in all day at school and you can do nature things it's nice.
- Jessica:* Okay. Imagine that you hadn't participated in PPSS. You'd just – you'd never done it. What would – would there be anything different about you? Like what – would there be anything missing because you didn't do it?
- K:* Anything missing. About me or my relationship with my daughter?
- Jessica:* Yeah. Well, both in terms of who you are as a parent now and the relationship that you have with your kids now.
- K:* Well, I don't know. I'm not sure. I don't really – I guess it's just – again the positiveness of the learning experience and I don't know if – I'm trying to think with my other kids because I didn't – I didn't do that program with them and –

- Jessica:* Well that's an interesting thing to think about it too. So you have five kids and you did this program with Maria but not – not the other four.
- K:* Right.
- Jessica:* Do you think there's anything – is there anything different about the way in which you've been involved in Maria's education as compared to the other four –
- K:* Well you know what –
- Jessica:* -- because of this program?
- K:* I think they always like seeing you at school, no matter what. You know what I mean? Like or just spending the time with that individual child.
- Jessica:* Yeah.
- K:* Now and it's nobody else. It's just me and you, mom, you know and so I think that's always nice for them.
- Jessica:* Yeah.
- K:* And –
- Jessica:* Did it do anything for you?
- K:* Oh yeah, well you know, I like to do things individually with each one of them and – and you know there was a time in my life where it was like okay, I'm gonna – we're gonna have a date night and it's just gonna be me and one of the kids, you know, and just take that child out because they need that, you know.
- Jessica:* Yeah, yeah.
- K:* But you get caught up in – you know – the craziness of life and of course it goes by the way-side and you're like – I want to – you know I want to make it every month that I spend at least one of those days with one of those kids, you know, and so it kind of – it's not like it forces you into it but it just makes you set that time aside for them. You know but –
- Jessica:* Okay.

- K:* -- it's a good thing.
- Jessica:* Okay. Okay. Is there anything else you can think of about the ways in which PPSS may have impacted your involvement in your kids' education?
- K:* Ways in which – I don't know. Like how do you mean it? I'm trying to think of another way to word it. I don't feel like I'm repeating myself.
- Jessica:* Oh, okay. Sure, yeah.
- K:* Am I repeating myself?
- Jessica:* Yeah. They're hard questions I know. Are there any other ways that you think participating in PPSS has impacted you as a parent?
- K:* Any other ways? Besides like – you mean spending individual time and –
- Jessica:* Yeah, and maybe getting to know some of their teachers and getting to know the other parents, are there any other – any other things that you think PPSS might have done for you positive or negative?
- K:* I guess what – like from myself just being – doing some of the programs I'm sure that I've learned something that I didn't know because you can't – you know everyone found the museum just – I mean we made the – we made paper at one of the museum stations, you know and I just thought that was neat. I never knew that that was the way that paper was made, you know, just something simple like that, you know.
- Jessica:* Yeah, yeah.
- K:* And just I'm sure there was other things. I can't think of anything right now but I know that I – every time I go down there I learn something different.
- Jessica:* And why does that matter to you? Why is that important?
- K:* I think it's good to always learn and grow, you know, and keep your mind, all those little synapses in your brain exchanging, you know and –
- Jessica:* Yeah, yeah.

- K:* So you always should try something, to learn something different.
- Jessica:* Well, I cannot thank you enough for the time that you've taken, especially when you're babysitting a four-week-old. I am very, very grateful.
- K:* (*Laughing.*) Oh, you're welcome.
- Jessica:* And clearly that is one very good baby.
- K:* She is. She just cried now so it's okay (*Laughing.*)
- Jessica:* Oh, yeah. That's awesome. So a very quick thing and then I'll let you go.
- K:* Okay.
- Jessica:* There is a potential opportunity for another interview at the Franklin Institute actually.
- K:* Okay.
- Jessica:* So all the parents that I interview, there will be about 20 of them –
- K:* Okay.
- Jessica:* -- will all be invited to the Franklin in the Fall and if you're able to make it, terrific, and if you're not, I understand.
- K:* Okay.
- Jessica:* And it'll be a dinner and you'll have an opportunity to listen to the results from all of these interviews and then give me some feedback on them. And so –
- K:* Okay.
- Jessica:* -- yeah. So I'll contact you and let you know when that is and would love for you to come but would understand with five kids and – that you might not be able to. So I will keep you posted and at that point I will also send you a \$25.00 American Express gift card, just a very small thank you for the time that you've spent.
- K:* Okay.

Jessica: All right?

K: Sure.

Jessica: So thank you, so much. I really appreciate it.

K: Oh, you're welcome.

Jessica: I hope you have a wonderful Summer.

K: Thank you.

Jessica: And yeah, and we'll talk again. Thanks so much, K.

K: Okay. You have a good one --

Jessica: All right.

K: -- Jessica.

Jessica: Take care.

K: Bye.

Jessica: Bye bye.

[End of Audio]

Appendix F

**Rethinking Parent Involvement Study
Follow-Up Interview Guide****Part I: Review of the study**

Thank you for agreeing to talk with me again. You remember that I am conducting a research study to better understand the various ways in which *Parent Partners in School Science* may have impacted yours and other parents' involvement in your child's schooling. I have interviewed a total of 20 parents who participated in the program, and now I'd like to share the results of those interviews with you, and get your feedback.

Part II: Getting parents' feedback on the model

After analyzing all the data, I came up with six theoretical statements or propositions describing how the program facilitated parent involvement [review each one]. I'd like to talk specifically about these statements.

1. Do they generally describe your experience with the *PPSS* program? If not, why not?
2. Thinking about your program experiences, is there anything that doesn't make sense to you about these theoretical statements?
3. Is there anything that feels really problematic or just plain wrong about these statements?
4. If you could share this theory with one person at your child's school, who would it be and why?
5. Do these theoretical statements make you think about anything we didn't discuss during our interview?
6. Is there anything else you would like to share with me?

Appendix G

Example of a Memo

Social capital as a building block for engagement

The museum program gave parents the opportunity to build social capital, and almost more importantly, social capital that they perceived they didn't already have, a significant point amongst this group of parents who were fairly well educated compared with low-income, urban parents in the literature.

Social capital took the form of either increased or qualitatively different types of interactions with teachers and parents (just dealing with teachers here). Through the program, parents got a chance to talk with them more. Typically during the school year, parents see teachers at formal, structured points – like parent/teacher conferences which are 15 minutes in length – or at informal points – like when they drop their kid off at school in the morning or pick their kid up “from line” in the afternoon. Parents' perceptions were that they just didn't get to talk with the teacher a whole lot. The museum program provided additional points of access to the teacher, times that they could talk more with her – like when riding the bus to the museum or helping in the school garden.

Also through the program, parents got a chance to talk with teachers differently. The usual conversations that happen during the year are driven by the teacher, the teacher is in control of these conversations – like the parent/teacher conference, where the teacher is offering information about the child's progress, or other times when the teacher requests a conference, which then usually focus on a particular problem with the child and how to resolve it to the teacher's liking. The parent is rarely in control of these conversations, and the conversations are structured according to a formal hierarchy where the teacher is in charge. But the museum program gave parents a chance to break down that hierarchy, to have conversations with the teacher where the power was slightly more distributed. The way this happened was on a personal level, a more social level, as though they were getting to know each other at a party or something. So, the parent got to find out about the teacher's kids, how old they were, what they liked. One parent talked about finding out that the science teacher had so many animals at her house that some of them lived in the bathtub. All of this gave parents a more personal access point to the teacher, and thus to the school network.

Why did these interactions matter to parents? They found out more or different information about their child. When talking with teachers in a more relaxed way, in a more personal way, in a more informal way, they often found out things about their child that they didn't find out through parent/teacher conferences. One parent said she found out what her kid was like in class, how she answered questions in class, things that went beyond just how she did on tests. This information made her feel like she had a better picture of her child's learning process at school, like she was more on top of what her child was doing at school. And that made her feel good.

This suggests to me that parents activated their social capital. So it doesn't seem to be that their just gaining access to the school network, but also that they're using that access to find out more about their child, to monitor what their child is doing, to check what's going on at school. That is authoring – so the activation of social capital may lead to a specific form of authoring. Need to pay attention to this, and figure out if it's always that social capital leads to monitoring/finding out more, or if other things also happen from the activation of social capital.

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