



Parents' Beliefs and Commitments Towards Formal Education and Participation in Book-Sharing Interactions Amongst Rural Mayan Parents of First Grade Children

Citation

Nieto, Ana María. 2016. Parents' Beliefs and Commitments Towards Formal Education and Participation in Book-Sharing Interactions Amongst Rural Mayan Parents of First Grade Children. Doctoral dissertation, Harvard Graduate School of Education.

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Parents' Beliefs and Commitments towards Formal Education and Participation in Book-Sharing Interactions amongst Rural Mayan Parents of First Grade Children

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A Thesis Presented to the Faculty
of the Graduate School of Education of Harvard University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

2016

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Dedication

*To my dear friend Yan Yang
and to all children who grow up in rural areas*

Acknowledgements

This dissertation would not have been possible without the guidance and support of many mentors, colleagues, friends, and family members. However, no one deserves more gratitude than the parents and children who so generously shared with me their time and knowledge. Gracias infinitas por su generosidad y confianza. Nimalaj mltyox che ukub'axik ik'ux chuwe e ir itob'anik wuk'.

Throughout my doctoral journey I was incredibly fortunate to work under the guidance of my four committee members: Professors Hirokazu Yoshikawa, Karen Mapp, Paola Uccelli, and Diana Leyva. I want to dedicate a few lines to each of them.

I came to HGSE with the hope of working in one of Professor's Yoshikawa's research projects. After seven years of learning from Hiro, I continue to be amazed by his brilliance, his kindness and his devotion to research and mentorship. Hiro challenged me and supported me at every step of this journey, pushing me to give my best with great care for my well being. There are no words to express how thankful I feel for having had him as my advisor.

Professor Karen Mapp was also a continuous source of support during my time at HGSE. She ignited my passion to work in the field of family engagement. Throughout the years supported me in maintaining my commitments to social justice work and always pushed me to think of the implications of my work. It was a true honor and a pleasure to work under her guidance.

I met Professor Paola Uccelli later in my doctoral journey, yet her influence was immense. Professor Uccelli introduced me to the world of language and literacy. She was incredibly generous with her time, helping me understand concepts that were new to me,

working with me through methodological details, and providing me with careful and detailed feedback. Her interest and deep respect for my work were a source of strength throughout this process.

Professor Diana Leyva's passion for learning about the ways in which diverse families can support their children's learning has been an inspiration for my own work. I am deeply thankful for the time that she spent sharing her expertise in coding and analyzing data on parent-child interactions and her invaluable insights in helping to communicate my ideas more clearly.

This research would not have been possible without the financial support of the Frederick Sheldon Traveling Fellowship from Harvard University; the Patrice L. Engle Dissertation Grant for Global Early Child Development from the Society for Research in Child Development; and the Summer Independent Internship Travel Grant from the David Rockefeller Center for Latin American Studies at Harvard University.

I also owe a great deal of gratitude to the individuals who made my field work in Guatemala possible. Katy Anis, from Save the Children, opened the door for the opportunity to conduct this research, and provided me with her guidance and feedback as I crafted the project. The Save the Children team in Guatemala, Lilia Cifuentes, Rolando Herrera, Fabiola Galindo, Ana Quixtan, Juan Antonio Us, Mario López, María Riquiac, Máximo Gómez, Gary Tzun, Sara Chacaj, Rolando Zacarías, Abelino Castro, and the teachers and volunteers in the four communities, all gave their time to ensure that my field work was a success. Mario Marroquín and Sebastian Suy, far exceeded their role as interpreters becoming invaluable academic partners in the data gathering and analysis processes. The Galindo-Natareno family: Rufi, Alirio, Fabiola, Osman, Pablo, Melani,

Sandro, Joselyn, Elisa, Abisai and Sandrito, who welcomed me into their home as one more member of the family. Celeste de León, Ingrid Aguilar, Lady Jesús Calo, Danilo Alvarado, Lester Ivan, and David de León, made me feel at home. A todos, mis más profundos agradecimientos por su inmenso apoyo y por hacer de mi tiempo en Santa Cruz del Quiché una invaluable experiencia de crecimiento profesional y personal.

I am also deeply thankful with my colleagues and dear friends Yan Yang, Lynneth Solis, Jenny Jacobs and Shauna Leung who closely examined my data with me, pushed me to consider alternative interpretations, provided me with careful feedback on my writing, and always cheered me on. I'm also in debt with Ana Medina and Gladys Aguilar, who provided invaluable insights during the construction and validation of the coding scheme of the book-sharing interactions, and with Stephen Hoffman, who supported me in conducting cluster analysis. It was a true honor and an inspiration to be able to learn from them. I am also thankful for the support I received during my time at HGSE from Rusty Carlock, Celia Gomez, Stephany Cuevas, Houman Haroumi, Kayla Boisvert, and Maung Nyeu. Thank you for pushing me to see the world differently and for your friendship. Thank you also to my friends who kept my spirits up from afar: Juanita Lleras, María Consuelo Gaitan, Luisa Suarez, Inti Guerrero, Sergio Torres, and Paula Cano.

Finally, I want to thank my family –my parents, Helena and Mauricio, my sister, María Camila, and my husband and best friend, Francisco. I can say without question that I would not have been able to complete this journey without their love and support. Gracias por siempre creer en mí y por acompañarme en la realización de mis sueños.

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Abstract

As Western schooling continues to expand and reach remote communities, it is imperative to understand rural parents' beliefs about formal education and the ways in which they can support their children's schooling. Sociodemographic changes in rural communities have been connected to shifts in parents' cultural values and practices (Greenfield, 2009), and parental participation in the institution of Western schooling has been identified as an important influence in these changes (Chavajay, 2006; LeVine et al, 2003; 2012, Rogoff & Chavajay, 2002; Rogoff et al., 1993). This dissertation contributes to this knowledge base by exploring both schooled and unschooled parents' beliefs and commitments towards formal education and their participation in a book-sharing interaction in four rural Mayan communities.

In the first study, I used grounded-theory methods to characterize and compare schooled and unschooled parents' beliefs on the benefits of formal education for their children's futures and the commitments that they make to support their children's schooling, paying particular attention to interactions around written language. In the second study, I used cluster analysis to characterize Mayan parents' book-sharing styles on the basis of the degree to which parents engaged their children as interlocutors in the interaction and of the type of content they emphasized, and to examine differences between schooled and unschooled parents' book-sharing styles. Both studies were conducted with 30 parents from four Mayan communities in which Western schooling was introduced over the last decades but where there is still wide variation in parents' schooling levels –making them ideal sites to study the influence of schooling on parental beliefs and practices. Taken together, the two studies provide evidence on cultural change

and continuity, and identify parents' participation in Western school as an important influence on parent-child interactions while also calling attention to the role of other parental experiences in shaping their beliefs and practices.

I. General Introduction

As Western schooling continues to expand and reach remote communities, it is imperative to understand rural parents' beliefs about formal education and the ways in which they can support their children's schooling. Cross-cultural studies on human development conducted during the 1970s and 1980s established a clear difference in the beliefs and socialization practices of parents from traditional agrarian and industrialized societies (e.g., LeVine & White, 1986, 1987; Ochs & Schieffelin, 1984; Whiting & Whiting, 1975). Sociodemographic changes in rural communities have been connected to shifts in parents' cultural values and practices (Greenfield, 2009), and parental participation in the institution of Western schooling has been identified as an important influence in these changes (LeVine et al, 2003; 2012). Studies conducted in Mayan communities have been central to this knowledge base both by serving as the basis for influential theorizations on the different approaches to children's socialization between traditional and industrialized communities (Rogoff, 1990, 2003), and by providing evidence of the influence of parents' contact with the institution of Western school on their interactions with their children (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993).

In spite of the attention devoted to Mayan parenting practices on these influential studies, the more specific topic of Mayan parents' support for their children's formal education has received scant attention in the literature. This dissertation contributes to this gap in the research by exploring both schooled and unschooled parents' beliefs and commitments towards formal education and their participation in a book-sharing interaction in four rural K'iché Mayan communities undergoing sociodemographic

change. While schooling was introduced over the last two to five decades to these four communities, there is still wide variation in access to school amongst the parents' generation, making them ideal sites to explore the influence of participation in schooling in parental beliefs and practices.

The two studies in this dissertation provide evidence of both on cultural change and continuity in Mayan parents' beliefs about the benefits of formal education for their children's futures; the commitments they make towards their children's schooling; and the way in which they approach book-sharing—a specific task that has been identified in previous research as supporting children's school-relevant skills. Taken together, they provide further evidence on parental schooling as an important influence in shaping children's learning environments, while calling attention to the potential role of other parents' experiences in shaping their beliefs and practices around their children's formal education in communities undergoing social change.

Previous studies in Mayan communities

Mayan communities were the focus of influential research in child development during the 1980s and 1990s (e.g., Gaskins, 1996, 1999; Rogoff, 1990, 2003). These studies provided detailed accounts of Mayan parents' beliefs about children's development and of the daily interactions through which children were socialized. At the time few children attended school and Mayan parents reportedly questioned the benefits of schooling for agricultural occupations (Gaskins, 1996; Rogoff, Correa-Chávez, & Navichoch Cotuc, 2005).

Mayan parents' interactions with their children stood in contrast to the Western model, which is often assumed as normative in developmental research. While children in

industrialized societies are segregated from the work and social activities of adults, children in Mayan communities were integrated into the fabric of their communities' daily life and had the opportunity to observe and participate in adult activities from an early age (Gaskins, 1996, 1999; Rogoff, 1999, 2003). Within this arrangement, Mayan children were expected to learn by observing intently and "pitching in" when they were ready to contribute without much reliance on verbal explanations or feedback –a process termed by Rogoff as "intent participation". In contrast, children in industrialized societies are prepared for their adult life in situations in which adults purposefully simplify activities, use explicit verbal instructions, and direct children's attention and motivation to learn through the use of strategies such as test questions and praise (Moreli, Rogoff & Angelillo, 2003; Rogoff, 2003). Given that in "intent participation" the expectation is that the child adapts to the situation, this approach has been termed as "situation centered". This approach stands in contrast to the "child-centered" approach in which the adults adapt situations to facilitate children's learning.

Since the time in which Rogoff's and Gaskin's studies were conducted Mayan communities have undergone significant sociodemographic changes moving from dependence on subsistence agriculture to a cash-based economy and from being relatively isolated to being increasingly connected to the outside world (Joy, Lipke, & McKay, 1992; Rogoff, Correa-Chávez, & Navichoc-Cotuc, 2005). The institution of Western schooling has also become much more prevalent in many children's daily lives (Rogoff et al., 2005). Social Change and Human Development theory states that these types of sociodemographic changes lead to shifts at the levels of cultural values, learning environments and developmental pathways (Greenfield, 2009). Parental commitments,

defined as the private contributions that parents make to formal education, are an important factor in shifts in learning environments in communities undergoing sociodemographic changes (Levine & White, 1987). In turn, the participation of mothers in the institution of Western schooling has been shown as an influential factor in bringing about change in mothers' ideas about formal education and in their interactions with their children (Levine et al., 2003; LeVine, LeVine, Schnell-Anzola, Rowe, & Dexter, 2012).

There is evidence that sociodemographic changes in Mayan communities are related to shifts in the value assigned to formal education and in mother-child interactions. Rogoff and colleagues found changes in the views about formal education amongst Mayan children across the past decades and in their participation in household work (Rogoff et al., 2005). Ishihara-Brito (2013) found changes in the value assigned to education amongst Mayan parents from seven different cultural groups in four departments. Observational studies comparing schooled and unschooled mothers found that mothers' participation in the institution of Western schooling influenced their interactions with their children (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993). However, none of these observational studies focused on activities identified in previous research as supporting children's formal education. Thus, despite Mayan children's increased participation in the institution of Western schooling, few studies have focused specifically on the role that their parents may play in directly fostering school-typical learning. Given the increasing centrality of schooling in Mayan children's lives and previous findings on the influence of parents participation in Western school in influencing parent-child interactions in contexts undergoing sociodemographic change, there is a need for studies that specifically focus on examining the beliefs and practices

around children's formal education of parents with different schooling levels in Mayan communities undergoing sociodemographic change.

This dissertation's contribution

The lack of contemporary research on Mayan parents' role in supporting their children's formal education has arguably perpetuated the view that Mayan parents' values and socialization practices stand in conflict with the values and practices of Western schooling. For example, teachers and practitioners working in the four Mayan communities in which I conducted these two studies claimed that parents in rural communities, and particularly those who did not attend school, did not value formal education for their children and did not have much capacity to support their children's schooling at home. In spite of these wide spread beliefs, research with parents who grew up in isolated rural communities and have come into contact with the values and practices of industrialized societies shows that these parents assign a high value to formal education for their children's future and invest both economic resources and time to support their children's schooling (Goldenberg & Gallimore, 1995; Goldenberg, Reese & Gallimore, 1992; Levine et al., 2003, 2012; Levine & White, 1986, 2003; Reese & Gallimore, 2000; Reese et al., 1995). Studies with Mayan parents have documented shifts in the value assigned to schooling (Ishihara-Brito, 2013), as well as provided evidence on the influence of their schooling in interactions with their children in activities such as interacting with a novel object, building a puzzle and participating in a problem-solving discussion (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993). Yet no studies have focused on examining Mayan parents' engagement in activities which have the potential to support children's school-relevant learning.

This dissertation consists of two studies intended to explore schooled and unschooled Mayan parents' beliefs and commitments towards their children's formal education, and more specifically the ways in which they support their children in the task of learning to read. I focus on the parents' role in supporting their children's literacy development, as the ability to comprehend written language in the early years of primary school provides a critical foundation for a child's academic success (see Slavin et al., 1994 for a review). Within the field of literacy development, I focus my inquiry on book-sharing as frequency and styles of book-sharing interactions have been connected to children's receptive and expressive language and early literacy learning across a wide variety of nationalities, social classes, and ethnicities (e.g., Bus, van Ijzendoorn, & Pelgrini, 1995; Dickinson & McCabe, 2001; Leseman & de Jong, 1998; Scarborough & Dobrich, 1994; Sénéchal et al., 1998). Given the knowledge base on the influence of parental schooling in shifts in parental values and practices (Greenfield, 2009), it is expected that Mayan parents with different schooling levels will differ in terms of their beliefs and commitments (study 1), and the specific ways in which they interact with their children around a book (study 2).

Both of these studies drew data from a sample of 30 K'iché-speaking rural Mayan parents of first grade children from four villages which are increasingly connected to outside communities and based on a cash economy. While formal education has been accessible in these four communities for the last two to five decades, there is still wide variation in access to school amongst the parents' generation, making them ideal sites within which to examine the influence of parental schooling in beliefs, commitments and book-sharing styles.

In the first study, I use grounded-theory methods to answer the following research questions:

1. What are Mayan parents' beliefs regarding the benefits of formal education for their children's futures in four communities undergoing sociodemographic change?
2. What commitments do these parents make to support their child's formal education, and more specifically, what activities do they engage in to support their children's literacy development?
3. Do parents' beliefs and commitments about formal education vary across groups of parents with different schooling levels? .

Turning from beliefs and commitments to actual behaviors in support of school-related learning, in the second study I provide an in-depth examination of these parents' participation in a book-sharing interaction. In this study I ask:

1. What are the book-sharing styles of rural Mayan parents –as captured by their interactional roles and the content of their talk– as they share a book with their first-grade child?
2. Do rural Mayan parents with different schooling levels vary in their book-sharing styles?

Understanding rural Mayan parents' beliefs about formal education, and particularly the views of parents who may not have had previous experiences with Western schooling, is critical to understand effective ways to build off their current practices to support their children's schooling. Learning more about the commitments that they make is important for interventions that seek to validate, and expand the efforts

of these parents as they seek to support their children's education. In particular, understanding the ways in which both schooled and unschooled parents can engage in a book-sharing activity is a fundamental step in designing literacy interventions that seek to engage all parents regardless of whether they attended school or not. This type of inquiry allows the identification of specific ways in which both schooled and unschooled parents can support their children's literacy development that are well-aligned with our knowledge base of children's literacy development *and* with the ways of interaction that feel most comfortable to them.

The results of these two studies elucidate both change and continuity in parents' beliefs, commitments, and the specific ways in which parents interact with their children in four Mayan communities moving from a subsistence model to a cash-based model. Taken together they contribute to the knowledge base of parent-child interactions from a cross-cultural perspective by providing further evidence in support of Human Development and Social Change Theory (Greenfield, 2009). They also contribute to previous efforts to understand the influence of parental schooling on changes in parent-child interactions by elucidating the influence of parents' participation in the institution of Western school in their beliefs about formal education and their interactions with their children, while calling attention to other aspects of parents' experiences which may also influence parental beliefs and practices.

II. Study 1: Mayan Parents Beliefs and Commitments to their Children's Formal Education

Socio-cultural and ecological theories on human development propose that children's development is shaped by social interactions that take place within culturally defined arrangements of life and work (e.g. Bronfenbrenner, 1977; Rogoff, 1990, 2003; Whiting & Whiting, 1975). This literature has established notable contrasts in parental beliefs and socialization practices between traditional agrarian and industrialized societies (LeVine & White, 1986; Rogoff, 1999, 2003; Ochs & Schieffelin, 1984). Worldwide sociodemographic trends show a movement from the first types of environments –characterized by rural residence, subsistence economy, low-technology and informal education at home, to the second –characterized by urban residence, commerce, high-technology and formal schooling. Social Change and Human Development theory states that these types of sociodemographic changes lead to shifts at the levels of cultural values, learning environments and developmental pathways (Greenfield, 2009). Parental commitments, or the private contributions that parents make to formal education, have been identified as a fundamental factor in shifts in children's learning environments in times of social change (LeVine & White, 1986, 2003).

Over the past decades Mayan communities in Guatemala have undergone some significant sociodemographic changes. Even remote villages are increasingly moving away from agrarian subsistence to cash-based economies characterized by economic activities outside of the family unit and a concomitant increase of formal schooling as a central component of daily life for many children (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff, Correa-Chávez, & Navichoch Cotuc, 2005). Findings from previous

studies suggest that there may be important shifts in Mayan children's and parents' beliefs about the benefits of formal education for their own futures from not seeing the benefits of formal schooling for agricultural life, to valuing skills to communicate in Spanish and placing more value in finding a well paid job (Ishihara-Brito, 2013; Rogoff et al., 2005). These studies have also found reductions in children's participation in family work and more parental participation in children's homework (Ishihara-Brito, 2013; Rogoff et al., 2005). Observational studies have also evidenced the influence of maternal schooling in changes in the ways in which Mayan mothers interact with their children, resembling the types of practices often found in industrialized communities specifically due to their participation in the institution of Western schooling, in activities such as interacting with a novel object, building a puzzle and a problem-solving discussion (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993). Previous studies in communities undergoing similar sociodemographic change, have found that mothers' contact with the institution of Western schooling influences their beliefs about formal education and their investment of economic resources and time in school-supporting activities (LeVine et al., 2003, 2012; LeVine & White, 1986, 1987). Studying Mayan parents' beliefs and commitments at this particular historic time is important. For example, there is still wide variation in access to school amongst the parents' generation in Mayan communities, making these communities ideal sites within which to examine whether variations in beliefs and commitments exist across groups of parents with different schooling levels.

This study seeks to contribute to our knowledge regarding shifts in parental beliefs and commitments around formal education in indigenous communities

undergoing shifts from a subsistence economy to cash-based economy by comparing schooled and unschooled Mayan parents' beliefs about the benefits of formal education for their first-grade children's future, and their commitments to support their children's schooling. It explores these issues in four Mayan communities in Guatemala where Western schooling was introduced over the last two to five decades but where not all of the parents had access to school.

Theoretical framework: Social Change and Human Development

Cross-cultural studies on children's development have drawn general contrasts in children's socialization patterns between traditional agrarian and industrialized societies (LeVine & White, 1986; Rogoff, 2003; Schieffelin & Ochs, 1984). Traditional agrarian societies are described by the theoretical prototype of *Gemeinschaft* (community) and industrialized societies by *Gesellschaft* (society) introduced by German sociologist Tönnies in 1887 (1957 in Greenfield, 2009). These theoretical prototypes which serve as extreme points along a continuum are defined by contrasting demographic characteristics. While *Gemeinschaft* are rural, small-scale, low-tech, homogenous, relatively self-contained environments, *Gesellschaft* are urban, large-scale, high-tech, heterogeneous, and permeable environments.

According to Social Change and Human Development theory each type of environment has a corresponding developmental pathway which is well adapted to the environment at the levels of cultural values, learning environments, and human development (Greenfield, 2009). These levels are organized in a multilevel causal model such that sociodemographic characteristics influence the learning environments, which in turn influence developmental patterns. In this multilevel model the adaptations made by

parents to the sociodemographic conditions of the environment are central to the learning environments experienced by children.

Gemeinschaft communities are characterized by rural residence, subsistence economy, low-technology and informal education at home (Greenfield, 2009). The production model in these communities is based in the household as the productive unit and children are directly involved in the ordinary, productive activities of adults from an early age (LeVine & White, 1986). Children are not segregated from the work of adults and their parents expect them to learn through keen observation until they are ready to contribute effectively to the task at hand (Rogoff, 1990; 2003). Given that the public morality inherent in this agrarian model is based on virtues of intergenerational reciprocity and filial loyalty, personal value is based on respect, duty, obligation and responsibility in the context of local age-sex hierarchies in permanent reference groups, such as members from the community who reside in close proximity to one another throughout one's lifetime (LeVine & White, 1986). The socialization pattern inherent to this model thus emphasizes children's acquisition of work skills, obedience and respect for the elders through participation in daily activities (LeVine & White, 1986).

Gesellschaft communities are characterized by urban residence, commerce, high-technology and formal schooling. In contrast to a production model based on the family unit, the production model of these types of communities is based on wage labor not defined by kin or locality which increasingly favors higher levels of educational attainment (LeVine & White, 1986). The public morality inherent in this model is based on individual's rights and values of specialized intellectual ideals; hence, the realization of potential and of personal value is equated with the individual's position within the

academic-occupational prestige hierarchy. This model thus emphasizes the intensive and extended preparation of children for later competition in the labor market (LeVine & White, 1986). Children in these societies learn in specialized contexts separated from the adults' daily activities in which the adults (e.g., teachers, "child-centered" parents) assume more of the responsibility for their learning by purposefully simplifying activities, using explicit verbal instructions, and directing children's attention and motivation to learn (Moreli, Rogoff & Angelillo, 2003; Rogoff, 2003). The maximization of schooling and a concomitant increase in the proportion of families' resources devoted to children are thus central features of the parent-child relation in this model (LeVine & White, 1986). In contrast to parents in *Gemeinschaft* communities, who do not invest much of their wealth on their children and expect material returns in their adult years, parents in *Gesellschaft* communities do not expect material returns and instead understand the parent-child relation in terms of social, emotional and moral benefits (LeVine & White, 1987). This change in the understanding of the relation is what Greenfield (2009) has referred to "the psychological pleasures of raising children" which "become more adaptive in *Gesellschaft* environments, where parents do not have to rely on the work of their children" (p. 411).

Social Change and Human Development theory predicts that as any sociodemographic variable shifts in either direction (i.e. either toward *Gemeinschaft* or *Gesellschaft* conditions), learning environments and developmental pathways are also likely to shift in a corresponding direction (Greenfield, 2009). The theory recognizes that these two categories are not binary but rather theoretical prototypes that serve as extreme points along a continuum. Thus intermediate values at the level of sociodemographic

dimensions will lead to intermediate results at the levels of values and development. For example, Keller (2007) studied intermediate environments between village and urban contexts by examining urban middle-class parents from societies moving from more *Gemeinschaft* to more *Gesellschaft* conditions in Costa Rica, India and China. This study found that the child-rearing practices of parents living in these intermediate environments were influenced by values of interdependence of their own parents, as well as by their own adaptations to their present urban middle-class lifestyle in which values of individual autonomy were increasingly prevalent.

Evidence also shows that the specific types of commitments that parents make at times of social change are an important factor to consider as these will vary according to the cultural models of parenthood in different societies (LeVine & White, 1986). Parental commitments, understood as the private contributions made by families to education (LeVine & White, 2003), can take a variety of forms, ranging from investments of financial resources to investments of time in activities intended to support the educational careers of children. The specific forms will vary according to cultural values and contextual settings. For example, shifting sociodemographic conditions in a *Gesellschaft* direction in Japan and the United States resulted in increasing parental commitments to enhance the life chances of their children within the academic-occupational prestige hierarchy in both societies. Nevertheless, the specific types of commitments that parents made differed between the two societies. In Japan, mothers intensified their involvement in supporting their children's learning of school subjects through homework help and preparation for exams, a commitment which incorporated the Japanese tradition of women's devotion to domestic tasks of economic value. Parents in the United States were

more likely to contribute to their children's future through their commitment to move to communities with better schools, even when the costs involved require that the mothers work outside of the home to afford it. This commitment incorporated the central feature of residential mobility of the family in search of a better life (LeVine & White, 1987). Finally, it is important to note that while culture influences the types of commitments that parents will make, individuals are not passive pawns in this process, but active agents who creatively construct adaptations to changing conditions. There is thus a need for detailed accounts of specific features of both change and resistance to change in particular communities in the context of their unique traditions (Greenfield, 2009).

This study seeks to contribute to the growing field of Social Change and Human Development studies by examining parental beliefs and commitments around formal education in four Mayan communities moving from more *Gemeinschaft* towards more *Gesellschaft* conditions. In what follows I first review the existing literature on the traditional approach to children's socialization and parental commitments to formal education in Mayan communities. In the second section I present an overview of social change that has been taken place in Mayan communities over the last decades, paying particular attention to the introduction of Western schooling and its conditions in these communities. In the last two sections I review existing studies on changes in parental beliefs and commitments around formal education, drawing from studies in Mayan communities and from other relevant literature.

Traditional Mayan Approach to Children's Socialization

Mayan groups are among the most studied rural communities in terms of children's socialization. Studies of these indigenous communities have evidenced

important points of contrast in parental beliefs and practices between traditional agrarian communities and industrialized Western communities. Ethnographic work conducted in the 1980s and 1990s in Mayan communities in Yucatan (Gaskins 1996, 1999) and Guatemala (Rogoff, 1990, 2003) placed Mayan communities in the *Gemeinschaft* extreme of the continuum. The two communities were rural, small-scale, homogeneous and relatively self-contained environments. Productive activities were centered on subsistence farming predominantly of corn and beans. The household functioned as the main economic unit and children participated in productive activities holding roles as workers and child caregivers from an early age. Few children in either of the communities attended school. Parents questioned the benefits of schooling for agricultural occupations and when children were needed at home, work took priority over schooling. Given that Mayan parents did not prioritize the investment of the family's resources or time to guarantee children's school attendance, it can be said that they made few, if any, commitments to children's formal education.

The lack of parental commitments to formal education was adaptive to the sociodemographic conditions in these rural communities. Given that the main productive activities were centered on the household unit, children's preparation for adult life was carried out in this context. Children were expected to learn from older members in their families through careful observation and by "listening-in" during activities that were central to the household's functioning until they were able to contribute effectively to these activities (Rogoff, 1990; 2003). Mayan parents emphasized work skills, obedience and respect towards others, thus expressing values identified within the literature as "traditional agrarian" (LeVine & White, 1986). They exerted their authority "to make

sure that children's work was done and done well, that they showed proper respect to those above them and proper responsibility to those below them and that they did not cause trouble in the community" (Gaskins, 1996, p. 356).

At the same time, Mayan parents were not involved in other aspects of their children's lives, in which the child's autonomy in making decisions was prioritized. For example, Mayan parents did not establish the types of daily routines around feeding, bathing and even sleeping that had been documented for middle-class parents in the United States (Gaskins, 1996; Rogoff, 2003). Furthermore, once children were recognized as having the ability to understand directives and carry tasks without much supervision (between the ages of 6 and 8), they were granted control in making decisions that affected their immediate and future well being, including whether to take medicine or attend school. This last decision was largely determined by the child's interest or disposition towards attending school. The parents' attitude in allowing children to make this decision for themselves was consistent with the widespread belief that "in many aspects, including intelligence, talents and dispositions, children were influenced almost completely by innate forces that were out of their own or their parents' ability to change or control" (Gaskins, 1996, p. 355). Thus, while Mayan parents were observed to devote a great deal of time and energy in activities that ensured the well being of the household and the community, they displayed few commitments to support their children's schooling.

Given that Mayan communities have undergone significant social changes in recent decades, it is expected that parental beliefs and commitments regarding formal education have also shifted. In what follows I provide an overview of the types of

sociodemographic changes that have taken place in these communities. Given the focus of this study on formal education, I devote particular attention to the introduction of Western schooling and its condition in Mayan communities.

Social Change and the Conditions of Schooling in Mayan communities

The last decades have seen important changes in different sociodemographic variables in Mayan communities. Even though the main economic activity in Mayan villages continues to be growing corn and beans and breeding cattle, pigs, and poultry for family consumption, villages across Guatemala have become increasingly reliant on a cash-based economy. Factors associated with this change include: seasonal wage labor in coffee and banana plantations in the coastal region; remittances sent from migrants to Guatemala City or the United States; increases in commerce of agricultural products and handcrafts in local, national and international markets; and access to some salaried jobs which require educational qualifications such as teachers and nurses within the villages (Chavajay, 2006; Chavajay & Rogoff, 2002; Joy, Lipke, & McKay, 1992; Menchú, 1983; Rogoff et al., 2005). In spite of the introduction of new sources of income indigenous communities in Guatemala continue to suffer from deep economic exclusion. For example, the Presidency's Office for Planning and Programming (Secretaría de Planificación y Programación de la Presidencia, 2016) estimates that while 38% of the non-indigenous population in Guatemala lives in poverty, the proportion for the indigenous population rises to 74%. Moreover, 6.5% of non-indigenous people live in extreme poverty in comparison to 24.3% of indigenous people.

In hand with economic changes, access to primary schooling increased in Guatemala over the last decades. Though in the last five years there has been a marked

decrease on net enrollment in public schooling, enrollment in private schooling may have continued to increase. According to figures from the Ministry of Education, the net enrollment rate in public primary schools at the national level increased steadily from 87.8% in 2001 to 98.7% in 2009 (Ministerio de Educación, 2001, 2016). Figures from UNESCO show a similar trend from 84.4% in 2001 to 97.37% in 2009 (World Bank, 2016). However, since 2010 these figures show that net enrollment rates in primary schooling have declined, reaching 81.0% in 2015 according to the Ministry of Education and 86.4% according to UNESCO (Ministerio de Educación, 2001, 2016; World Bank, 2016). Analysts attribute this decrease to the Ministry's poor institutional capacity at the local level to absorb the increased demand for education after the introduction of a law guaranteeing gratuity of education and a conditional-cash transfer program in 2008 (Instituto Centroamericano de Estudios Fiscales -ICEFI, 2011; Ministerio de Educación, 2014). In particular there is a concern for the lack of pertinence and quality of education provided to children from households living in extreme poverty who were able to access schooling for the first time after 2008 (ICEFI, 2011). It is also plausible that while enrollment in public schooling has declined, enrollment in private schooling has continued to increase. For example, a local consortium of private business working for the improvement of Education, estimates that in 2015, 23% of students in Guatemala were enrolled in private schools (Empresarios por la Educación, 2016)

The municipality in which this study was conducted, in which 84.4% of the population is rural and 98% self-identified as indigenous has a similar pattern in access to formal education, though with much lower levels of enrollment. Net enrollment in primary school increased from 52.7% in 1995, to 64.3% in 2001, and to a peak of 86.1%

in 2010. Since then it has decreased reaching 70.1% in 2015 (Ministerio de Educación, 2001, 2016). While net enrollment in high school has showed a steady increase, access to this educational level continues to be extremely low, particularly in rural areas. In 2015 net enrollment in high school was 23.8% at the national level and only 7.4% in the municipality in which this study was conducted (Ministerio de Educación, 2016).

The introduction of formal education in indigenous communities is also concerning in terms of quality. There is a gap between a progressive recognition of indigenous children's rights to quality education at the level of policies and poor quality in implementation. The need for bilingual and intercultural education that responds to the multicultural and pluralinguistic nature of Guatemalan society has been recognized since the signature of the peace treaties in 1996 which put an end to the 36 years of civil conflict largely affecting indigenous populations (Lopez, 2009; Richards, 2008; Richards & Richards, 1997). That same year the Guatemalan government started a National Program on Bilingual and Intercultural Education (PRONEBI) and in 2003 it created Vice-ministry of Bilingual and Intercultural Education (Lopez, 2009). However, these advancements at the policy level have not translated into better educational opportunities for indigenous children. Data from the self-evaluation of the teachers who applied for the bilingual bonus on 2008 showed that children enrolled in Bilingual Intercultural School were not being educated in the indigenous language as less than 50% of the applicants considered themselves fluent speakers –and less than 40% as proficient in reading and writing– in the language that they were supposed to be teaching (Müller, 2009). McEwan and Trowbridge (2007) found that only 30% of children who reported speaking a Mayan language were receiving at least partial instruction in that language. Indigenous children

were also more likely than non-indigenous children to attend schools with less experienced and qualified teachers and to lag behind non-indigenous peers in formal assessments of language and math with estimated test-score gaps ranging from .8 to 1.06 standard deviations in Spanish and .5 to .85 standard deviations in Math (McEwan & Trowbridge, 2007; Meade, 2011; Hernandez-Zavala, et al., 2006).

The low quality of schooling for Mayan children is particularly concerning in the area of literacy instruction in the first grade of primary school. The ability to comprehend written language in the early years of primary school provides a critical foundation for a child's academic success (see Slavin et al., 1994 for a review). Reading comprehension involves a wide array of skills, including "code-based skills" necessary to decode written language, as well as "meaning-based" skills necessary to comprehend content (e.g., Dickinson, Glonkiff & Hirsh-Pasek, 2010; Lesaux & Marietta, 2012). The distinctions drawn in Sénéchal and colleagues (2001) model of early literacy are useful to understand the complexity of this process. According to this model literacy consists of: procedural knowledge about writing and reading; children's conceptual knowledge about literacy; metalinguistic skills, such as phonological awareness; and aspects of children's oral language such as vocabulary and narrative knowledge (Sénéchal, LeFevre, Smith-Chant & Colton, 2001). *Procedural knowledge* (i.e., knowing how) refers to knowledge of the mechanics of reading and writing, such as the ability to recognize and trace letters. In contrast, *conceptual knowledge* (i.e., knowing why) refers to children's understanding of print conventions (e.g., you read the print and not the pictures in storybooks), understanding of the functions of printed artifacts (e.g., the uses of newspapers and lists), emergent reading behaviors (e.g., pretend reading of familiar reading materials), and

perception of themselves as readers. *Metalinguistic skills* refer to children's awareness of the structures of language such as phonological awareness of sounds in words. These three types of skills are necessary, but not sufficient in the task of becoming a successful reader. For children to effectively comprehend text they must also develop higher-level *oral language skills* such as vocabulary knowledge, and narrative and grammatical skills, as well as acquire relevant background knowledge (Dickinson et al., 2010).

Ethnographic studies have shown that literacy instruction in indigenous rural communities tends to be narrowly focused on procedural knowledge. For example, in a study conducted in a Mam speaking community in Guatemala, first-grade children spent most of their day at school writing *planas*, an activity in which the teacher wrote a letter, word or syllable on the top row of each child's notebook and the children copied it in the rows below until they filled a page (Hamberg, 2011). This activity corresponds to what is known in Latin America as the "método silábico" (the syllable method) in which children learn to read by "first present the vowels, then associating a vowel with a consonant, exercises for the student in the correct pronunciation of syllables that are later put together into words (Neijls, 1961).

In the community observed by Hamberg children had few opportunities to make-meaning of written texts. Texts were read exclusively in Spanish and the Mayan language was mostly used to give instructions and/or manage children's behavior. When children read texts in the classroom, the teachers emphasized fluency in reading rather than comprehension, correcting mispronunciations without discussing the content of the text (Hamberg, 2011).

My own observations in the first grade classrooms of the four communities in which this study was conducted provided a similar picture. In these classrooms, the teachers used pedagogical strategies to strengthen children's phonological awareness such as singing songs and playing words games, and children had the opportunity to listen to stories read to them both in Spanish and in K'iché during reading hour each day. Nevertheless, the bulk of the school day was spent filling out *planas*, copying from commercial primers requested by the teachers and purchased by the families, or drawing and coloring. Children did not get to interact with storybooks on their own as the ones that were available were kept in safe locations and they were not encouraged to write their own sentences or even words besides their names to mark the pictures they drew. There were thus few opportunities for children to interact with written language for authentic communicative purposes as there were few activities that were focused on the meaning of the text rather than the task of decoding or tracing clear letters.

In sum, Mayan communities have experienced sociodemographic changes in a Gesellschaft direction by becoming more highly dependent on economies based on wage labor and commerce. Formal schooling has become increasingly present in the daily lives of many indigenous children, though certainly not for all and particularly after the 6th grade. While educational policies recognize Mayan children's right to access high quality bilingual education, this right remains unrealized in practice. The low quality of schooling is particularly concerning in early literacy instruction which is narrowly focused on procedural skills giving children few opportunities to participate in activities which will allow them to develop the kinds of high-level literacy skills that are necessary for later academic success and participation in a knowledge-base economy.

Given the expectation that parents' beliefs and practices will likely shift at times of sociodemographic change, it is important to gain knowledge of the ways in which parents in Mayan communities understand the value of their children's formal education and the practices that they carry out at home to support their learning of school-typical knowledge, particularly literacy. In what follows I review studies on changes regarding parental beliefs about formal education and the commitments that they make to their children's schooling.

Changes in Parental Beliefs about Formal Education

Contact with the values, practices and institutions of Gesellschaft communities, and in particular contact with the institution of Western schooling, can influence the value assigned to formal education for children's futures (Levine et al., 2003, 2012; Levine & White, 1986, 2003; Rogoff et al., 2005). Rogoff and colleagues' research in the Mayan community of San Pedro over a period of 30 years, tells a story of increasing valuing of the benefits of formal education amongst children (Rogoff et al., 2005). As the offer of years of schooling expanded and more jobs that required educational credentials such as teachers and accountants became available, children reported aspiring to go further in school and to hold those types of occupations. This study also documented a shift in children's perceptions of the benefits of formal education at different points in time. In 1976, a time in which none of the parents in the sample held salaried professions and 10% held positions in commerce, nearly half of the children who were 9 years old in San Pedro at the time (47%) identified learning Spanish as a reason why they attended school and none identified having a good job. In contrast, in 1999 where a fourth of the mothers and a third of the fathers had a salaried job, 15% of the 9 year-old children

identified learning Spanish as a reason to attend school and 37% of them identified getting a good job as the main reason they attended school. This study did not provide any information on whether these changes in values were limited to the younger generation or whether the parents also experienced these shifts in their beliefs about formal education.

One recent study with 63 parents from seven ethnic groups (six Mayan and *ladinos*) from four departments in Guatemala found evidence of shifts regarding parents' beliefs on the value assigned to formal education (Ishihara-Brito, 2013). In contrast to reports of ethnographic studies conducted during the 1990s in Mayan communities, Ishihara-Brito (2013) found that parents' interviewed in the 2000s assigned great value to formal education. The participants in this study, half of who had not attended school, associated schooling with better paying jobs, the ability to write one's name, and the necessary skills to communicate in Spanish. By holding an instrumental view of formal education as the means to economic mobility, these Mayan parents endorsed academic-occupational values. At the same time they continued to endorse important elements of agrarian values, as they described good education as moral guidance. In their view education guided children to become responsible and to be able to distinguish "the good from the bad", and therefore "do the right thing" and not "walk the wrong path", becoming criminal or thieves (Ishihara-Brito, 2013, p. 190). In addition, these parents displayed beliefs on innate abilities, which have been identified as characteristic of Mayan communities, as children's success or failure in school were attributed to innate abilities such as intelligence or "weakness" (p. 191). The traditional value of deep respect for children's autonomy was also evidenced as some of the parents granted their children

the power to decide whether or not to attend school, and half said that their children will make the decision whether to continue to secondary school or not. Interestingly, this study did not find differences in the beliefs of parents who identified as Mayan and those who identified as non-indigenous, nor between parents whose children were in the first years of primary school and parents whose children were in the last three years of primary school. However, it did not establish a comparison between parents with different schooling levels.

Studies with parents who were educated in rural communities from Mexico and Central America and migrated to urban communities in the United States provide additional insights regarding changes in parents' beliefs about formal education as they come into contact with the values, practices and institutions of Gesellschaft communities (Goldenberg & Gallimore, 1995; Goldenberg et al., 1992; Reese & Gallimore, 2000; Reese et al., 1995). As these parents moved to urban communities they displayed a similar mixture of academic-occupational and agrarian beliefs in regards to their children's education. These parents also endorsed academic-occupational values by viewing formal education as the path to a better job, which in many cases evidenced a conscious break from the educational values of their parents. At the same time, they also expressed the belief that schooling (academics) and upbringing (morals) were intertwined, and that moral values were the basis for academic success (Goldenberg & Gallimore, 1995; Reese et al., 1995). These parents thus expressed valuing education for their children's future, but continued to view their role as parents primarily as rearing a moral and responsible child, teaching them right from wrong, respect for elders and

family unity, rather than as holding a role in arranging or encouraging academically-oriented activities at home to prepare children for schooling.

Both of these studies suggests that as parents from agrarian communities experience changes in their social environment, they may endorse some academic-occupational views such as an instrumental view of formal education for their children's future, while maintaining agrarian values such as the importance of moral aspects like respect, duty and obedience as the basis of success in life.

While neither of these studies compared the views of parents with different educational levels, other studies have found that parents' schooling may also influence their views of the importance of formal education for their children's future. LeVine and colleagues (2003) found that amongst mothers from low-socioeconomic neighborhoods in the Mexican city of Cuernavaca, the years that a mother had spent in school (range 1 to 9 years) influenced the extent to which she aspired that her son, and to a lesser extent her daughter, would have a *professional* occupation that required university training education, as opposed to *calificada*, white-collar and technical jobs requiring less education. These results were later replicated with mothers living in cities and rural villages in Nepal (LeVine et al., 2012). Regardless of wealth, age, urban residency, or husband's schooling, women with more years of schooling (range 0 to 16 years) and higher literacy levels were more likely to expect that their children would obtain a master's or professional degree than mothers with lower literacy levels.

In sum, both studies with parents who came in contact with the values, practices and institutions of Gesellschaft communities through migration, and studies with parents who have stayed in their place of residence and came into contact with Western

schooling, have documented changes in parental beliefs about the value of formal education and parental schooling has been identified as an important influence in such changes. The present study intends to contribute to this literature by examining the beliefs around the benefits of formal education for children's futures amongst Mayan parents who have come into contact with more Gesellschaft values and practices through their own participation in Western schooling and/or through other experiences such as their participation in waged labor, commerce and bureaucratic institutions.

Changes in Parental Commitments to Formal Education

Sociodemographic changes influence parental commitments to formal education both in the proportion of family resources that are devoted to support children's schooling, as well as in the types of activities in which parents invest the time that they have with their children (LeVine et al., 2003, 2012; LeVine & White, 1986, 1987; 2003;).

As societies move towards an academic-occupational economic model in which intensive and extended academic preparation becomes necessary to compete in the labor market, there is an increase in the flow of resources towards the younger generation (LeVine & White, 1986; 1987). Increases in children's schooling across generations in the Mayan community studied by Rogoff and colleagues (2005) were accompanied by decreases in children's contribution to family work. These results signal a shift in the flow of resources from the older to the younger generation, as children contribute less to the family pool of resources by reducing their participation in household work and arguably spend more of the family's resources to be able to attend school. A decrease in time spent on family work may also signal a potential increase in the homework time. Nevertheless, Rogoff and colleagues (2005) did not provide data on whether the parents

were actually investing more of their resources to support their children schooling or children's engagement in homework. Furthermore, this study did not provide information on the role that parents played, if any, in the new distribution of children's time, or explored whether there were any changes in the ways in which parents spent the time that they had with their children.

Ishihara-Brito (2013) found that Mayan and non-indigenous parents living in rural areas of Guatemala reported being actively engaged in their children's schooling by providing more homework time. In addition, they reported investing their own time in this particular activity by telling their children to do their homework, checking their notebooks, explaining how to do the assigned work, and/or asking their older children to provide this help. In particular parents reported checking their children's handwriting in the notebooks as the main way in which they checked their children's progress in school, signaling the importance assigned to the clear tracing of letters in schools serving Mayan children (see Azuara & Reyes, 2011 and Hamberg, 2011). While this study provides important information on generational changes in parental commitments towards their children's schooling it has two limitations. First, the data provided was too general to clearly understand the specific ways in which the parents interacted with their children around their homework. Second, this study did not provide information on whether parents who had been to school participated differently in their children's homework.

Previous studies in communities undergoing similar sociodemographic change, have found that mothers' contact with the institution of Western schooling influences their engagement in school-supporting activities such as helping with homework, and other behaviors such as reading to children and teaching the alphabet, numbers and colors

before the child entered school (LeVine, 2012). Two case studies in Mayan communities in México (Azuara & Reyes, 2011) and Guatemala (Hamberg, 2011) suggest that mothers who attended school may be involved in supporting their children's homework in ways that resemble how teachers interact with children in the classroom in Mayan schools. As previously described, Hamberg (2011) found that teachers in schools serving Mayan children focused on procedural knowledge by emphasizing the clear tracing of letters and fluency in reading rather than comprehension. The author observed a similar interaction with written text between one mother who had attended school and her child; when the child was reading an oath of allegiance his mother made comments on his fluency and asked him to recite the allegiance without any discussion of its content.

An ethnographic study in a Mayan community in Yucatan reported a similar approach to literacy at school and between one mother and her 7-year-old child (Azuara & Reyes, 2011). Literacy instruction in the first grade in this community was also limited to "drilling exercises on isolated features of written language" (p. 187). In cases where texts were read there was no discussion of their content, as children were expected to answer comprehension questions independently and in writing. Observations in the household of this child showed that the most common parent-child interactions around written language were school-related activities. These interactions were highly didactic and placed the child in a passive role. For example, the mother, who had a third grade education, would often take control of homework interactions by dictating the answers to the problems from the textbook. The child simply recorded these answers in her notebook. This mother also emphasized her child's development of procedural literacy skills by assigning the child and her younger sister exercises to practice their handwriting,

such as writing their names repeatedly. In this way the child's interactions with print at home resembled the school's approach to literacy instruction in which "reading is about decoding, and writing about tracing clear letters" (p. 187). Nevertheless, these studies did not provide data on how extended these activities were within the community or whether there were differences in participation in these activities between parents with different schooling levels.

Studies with other populations have shown that parents' own schooling experience and understanding of literacy development may influence their engagement in literacy-supporting interactions. Literacy-supporting activities such as teaching the alphabet and numbers or reading to the child were not considered important parental responsibilities before the child attended school by first-generation immigrants from rural backgrounds from Mexico and Central America (Reese et al., 1995). The lack of importance assigned to these activities was not related to a lack of value of formal education, but rather to the parents' understanding of literacy development as starting once children began attending school (Goldenberg et al., 1992). In line with the linear, highly structured, and code-based instructional method that these parents had experienced as children—in which they first learned the letters and sounds, then how to put them together in syllables, then words and finally extended texts—many parents did not believe that their children would be able to understand complete texts before learning to decode letters and words. Thus, parents did not read to their children until they began attending school. Furthermore, none of the parents reported reading to the child as a way of helping them to learn to read, though some families were engaged in literacy activities for moral purposes such as reading of Bible or other stories to teach their children a moral lesson

(Goldernberg & Gallimore, 1995; Reese et al., 1995). Children's own early attempts at reading and writing were also not seen by the parents as part of the process of learning to read and write, and thus the parents did not encourage or create situations for their children to carry out these activities at home (Goldenberg et al., 1992; Reese & Gallimore, 2000).

Once children entered school, the parents were actively engaged in providing help with homework in ways that were aligned with their understanding of the importance of procedural skills in learning to read. For example, when parents used books containing short stories with their children they focused on having children read the words on the page exactly as written, using strategies such as copying and repetition, paying little attention to the meaning of the text (Reese & Gallimore, 2000).

Taken together, these studies suggest that contact with values and practices of Gesellschaft communities influence parental commitments to formal education both in terms of investment of resources and investment of time in school-supporting activities. The parents' own schooling experience and their ideas about literacy development can influence the types of activities that they prefer to engage in with their children.

The Present Study

In spite of documented changes towards more Gesellschaft conditions amongst Mayan communities in which formal schooling is predicted to play a more central role in family life, the specific topic of Mayan parents' beliefs and commitments regarding their children's formal education has received scant attention in the literature. This study aims to contribute to fill this gap by exploring Mayan parents' beliefs about the benefits of formal education for their children's future and the commitments they make to support

their children's schooling, particularly the activities that they report being engaged in to support their children in the task of learning to read. Three research questions guided this study:

1. What are Mayan parents' beliefs regarding the benefits of formal education for their first-grade child's future in four communities undergoing sociodemographic change?
2. What commitments do these parents make to support their child's formal education, and more specifically, what activities do they engage in to support their children's literacy development?
3. Do parents' beliefs and commitments about formal education vary across groups of parents with different schooling levels?

In the current historical moment, parents may present a mix of beliefs about the role of formal education for fulfilling aspirations for their children's future and commitments to support their children's formal education. Parents with more contact with the institution of Western school may endorse more academic-occupational views and engage in more academically-oriented activities at home such as direct teaching of letters and numbers, reading books with children, or providing help with homework. Parents with lower levels of schooling may endorse more agrarian views and report fewer academically-oriented activities at home. Given previous studies with other populations, it is also expected that the parents' understanding of literacy development may influence the moment in their children's life at which they engage them in interactions with texts and the types of interactions that they privilege.

Research Design

Setting

Participating parents were recruited from 4 rural public primary schools located in the Quiché department of Guatemala in which an early literacy intervention was being implemented. More than 98% of the population in the four villages in which the schools were located self-identified as indigenous in the last national census (Instituto Nacional Estadística-INE, 2002). The four villages, which I refer to as the Mountain, River, Valley and Road villages, differed in their population size and accessibility, and the year in which the primary school was first opened within the village. Data on the population, accessibility and the data of inauguration of the school within the village are provided in Table 1.

Table 1
Population, Accessibility and Date of Inauguration of the School in the Four Villages

Community	Population ^a	Distance from urban center ^a	Available transportation	Date of inauguration of the school
Mountain Village	800	15 km	Private pick-ups	1999
River Village	906	7 km	4 buses per day	1971
Valley Village	440	8 km	6 buses per day	1974
Road Village	2,541	18 km	Buses every 10 minutes	1965

^a Data obtained from characterization documents produced by the Municipality's Office in 2012

^b Data provided by the Departamental Office of Education

The villages differed in their contact with the urban center in terms of distance and availability of transportation. Inhabitants of more accessible communities such as the Road and Valley communities had more opportunities to travel outside of the community and engage in commercial activities in the urban centers, than inhabitants of the

Mountain community who depended on the private transportation hired by the school teachers. Members of the Road and Valley communities also had better access to services provided by professionals and government officials who were able travel to the communities more frequently than to more remote communities such as the Mountain community. For example, a doctor who lived in the urban center had set a private practice in the Valley community as it was highly accessible by bus.

In three of the villages, the River, Valley and Road villages, the school was inaugurated before the participating parents were old enough to attend school (1971, 1974, 1965, respectively). In the most remote village, the Mountain village, primary schooling was inaugurated in 1999 when the participating parents were 13-, 12-, 10- and 6-years of age. Before 1999 any child who attended school had to walk for more than an hour to attend school in another village. In spite of differences in the time at which school became available within the village, there were parents with and without schooling in each of the four villages.

Social and political organization. The four participating villages currently display traditional decision making and problem solving processes, within bureaucratic organizations recently introduced by the Guatemalan government. In the villages across the municipality in which this study was conducted, consensus-based decision-making processes were traditionally led by a set of community leaders¹. While these roles were considered as a sacred calling which was assigned from birth, the individuals who occupied them were also recognized by the community due to a history of service. In line

¹ These leaders included: the Ajq'ij or Chuchqajaw, the spiritual guide of the people; the Chinimtal, the expert in the constitution of marriages; the K'amal B'e, the guide or adviser of the people (more in social than spiritual realms); the Iyom or midwife, expert in childbirth, and physical and mental health; the Wiqol B'aq, the bone healer; and a council of ancestral authorities.

with conceptions of Derecho Maya (Mayan law) the role of these leaders was to guide, mediate and facilitate the collective decision-making and problem solving processes in ways that were conciliatory, pacific, preventive, reparatory and flexible, and were aimed at promoting personal reflection of committed actions and the prevention of future offences (Cumes, 2009).

With the establishment of the System of Urban and Rural Development Councils (Sistema de Consejos de Desarrollo Urbano y Rural), a new form of local organization was introduced into Mayan communities in Guatemala. This system consists of 5 levels (Flores, 2010). At the local level Community Development Councils (Consejos Comunitarios de Desarrollo, COCODES) have the task of collecting social investment priorities. These priorities are then presented and negotiated at the Municipal Development Council (Consejo de Desarrollo Municipal), which includes the municipal government, other public institutions (Ministries of Health, Education) and non-governmental development institutions present in the municipality. The next level is the Departmental Development Council (Consejo de Desarrollo Departamental), which consists of departmental authorities, ministries, the mayors of the municipalities, the governor and representatives of universities, ethnic groups, women's associations and political parties. The regional and national levels have a similar structure to the Departamental.

While COCODES were initially introduced to the villages to determine government expenditure, these organizations have come to take on many of the roles that were exercised by traditional authorities. In the four communities that participated in this study, COCODES were in charge of organizing social and spiritual celebrations,

presiding all community meetings to resolve communal problems, and in some cases even of administering punishments.² Unlike ancestral leaders which required the recognition of the entire community, members of COCODES are sometimes elected through popular vote or simply selected by the municipality's mayor.

Economic activities. The main economic activity in these villages continues to be growing corn and beans and breeding cattle, pigs, and poultry for family consumption. However, and as is the case in Mayan communities across the highlands, these four communities are increasingly reliant on a cash economy. Official characterizations produced by the municipality in 2012 state that a sizable portion of the residents in the four villages travel seasonally to the coastal region to work for wages as laborers in coffee or banana plantations. Many others have migrated either to Guatemala City or to the United States and send remittances to their families. Other options for families to earn money are available within the community, such as harvesting additional crops like apples, peaches, carrots and avocados; producing handcrafts such as traditional woven blouses (huipiles) and skirts (cortes), and more recently household decorative products; serving as trade and retail intermediaries; providing transportation to sell these products in the municipality town's center; and setting up small stores within the village. There are no official records on the prevalence of these alternative occupations for each of the villages; however, there were visible differences amongst the four communities. The three more remote villages each had three small convenience stores. In comparison, the largest and more communicated community had 13 businesses including three restaurants, two stores which sold school supplies, and two booths with computers and

² These punishments come to known as “castigo Maya” have been the subject of much public opinion debate but little academic analysis (see Cumes, 2009).

internet connection. The majority of the participating families (26 of 30) had access to a cell phone within the household and some of the families (7 of 30) mentioned having a television set however, only people in the largest and more connected community have access to computers with connection to the internet in the two booths that provide this service.

Educational attainment and access. Available data on educational attainment at the village and municipality level suggests that in spite of the recent decrease in net enrollment to primary schooling and the limited accessibility to education beyond the 6th grade in rural communities, access to formal education is higher today than for the parents' generation. The only available data at the village level corresponds to the latest census conducted in the year 2002 (i.e. when the youngest parent was 9 years old and the oldest was 37). These data evidenced low educational attainment at all levels in the four villages. As expected, the most remote community, the Mountain village, had the lower rates in public schooling according to census records. Even though the River village was somewhat more remote from the urban center of the municipality than the Road village, they showed similar levels of educational attainment in 2002 (see Table 2).

Table 2
Educational attainment in the four participating communities in 2002^a

Community	Level of educational attainment (Percentage or number of people when less than 1%)		
	Primary school	High school	University
Mountain Village	44%	1%	0
River Village	60%	5.5%	1 person
Valley Village	53%	4%	0
Road Village	57%	4.9%	10 people

^a Data obtained from the last available census

Disaggregated data on educational attainment at the village level is not available for recent years. However, available data at the municipality level on the net enrollment at different levels of education show that net enrollment rates in public schools at the primary level steadily increased from 52.7% in 1995 to 86.8% in 2010, and decreased to 70.1% in 2015. Net enrollment in high school has increased steadily but this educational level is still not accessible for the vast majority of the population. In 2015 only 7.4% of youth in the municipality were enrolled in the higher grades of high-school (9th to 12th). Given that these data include the municipality's central town and that education beyond the 6th grade is not currently offered in the four communities included in this study, this proportion must be lower in each individual village. In sum, figures of net enrollment show that even if formal education has been offered within the villages for decades, barriers to access continue as not all children attend primary school and very few make it to the end of high school. Even though private schooling may be increasing in rural areas in Guatemala, this option was not available in any of the four villages.

Participants

Participants in this study were 30 parents and their first grade children. Children were between the ages of 7 and 9 at the time of data collection (M age = 86.8 months; SD = 7.0; range = 67.4 – 99.3). Parents were contacted during the first weeks of school (late January and early February of 2015) with the help of staff from *Leer Juntos, Aprender Juntos*, an early literacy intervention implemented by Save the Children between 2012 and 2015 in the four participating villages. This multi-year intervention as implemented in Guatemala during 2015 consisted of two components: a school and a community component. The school component consisted of four workshops on literacy instruction

strategies with first, second and third grade teachers each year followed by monthly individual on-site supervision/coaching. The community component consisted of three parent workshops each year; and weekly afterschool reading camps which provided children with the opportunity to borrow books from a Book Bank. Only parents of 1st to 3rd grade students were eligible to participate in the workshops, without capacity constraints (i.e., all parents of children in these three grades were invited to attend the workshops). At the start of data collection, at the beginning of a new academic year, none of the participating parents had attended the parent workshops and only two of the thirty children had attended afternoon reading camps and occasionally borrowed books in the previous year (i.e. 2014). Parents were eligible to participate in this study if: a) their child was entering the first grade for the first time (in general in rural areas in Guatemala children enter the first grade between the ages of 6 and 9 years); b) they did not have any other children who had been in the first, second or third grade in the three prior years (i.e. any parent who had the opportunity to attend any of the parent workshops in previous years was excluded); and c) they were the caregiver who most likely attend the parent workshops.

I contacted all eligible parents in person with the help of an interpreter and the support of principals, teachers and/or community volunteers from the intervention. Across the 4 communities 40 parents were eligible and 34 agreed to participate. However, in the Road village four of the parents who met the eligibility criteria at first contact, participated in the first workshop before I could interview them, making them no longer eligible. Hence, the final sample included 30 parents, 27 mothers and 3 fathers. Half of the children were girls (n = 15). Roughly 67% of the children (n = 20) were first

born, 13% ($n = 4$) were only child, and 20% ($n = 6$) were the youngest in their families. Roughly 77% ($n = 22$) had been enrolled in the kindergarten year and about 23% ($n = 7$) had not attended preschool the previous year.

There were 3 groups of educational attainment amongst the parents: 12 parents (all mothers) had *no schooling experience*; 10 parents (8 mothers and 2 fathers) had attained *1 to 3 years of schooling*; and 8 parents (7 mothers and 1 father) had attained *6 years or more of schooling* (i.e. 9 years or 12 years). Parental schooling was not considered as a criterion during the recruitment process. Thus, these three categories were set post-hoc and correspond to categories used in the national census to identify levels of schooling in rural areas. The distribution of parents by level of schooling in this sample is very similar to that reported for rural populations in Guatemala in the last census: 40% of the study participants did not attend school compared to 38.8% at the population level; 60% of the participants had at least one primary grade compared to 53% at the population level; and, 6.7% of the participants had at least one secondary grade compared to 6.5% at the population level (INE, 2002). In three of the four villages (Mountain, River and Road villages) there were participants from each of the three groups of schooling. In the Valley village there were no participants with 6 years or more of schooling experience. There were no statistically significant differences on the average age of parents in these three groups, $F(2, 27) = 1.93, p > 0.10$. However, none of the participants over the age of 35 had 6 years of schooling or more. Tables 3 and 4 present the children's and parents' demographic information (respectively) for the three parental schooling groups.

Table 3
Child sociodemographic information by parental schooling level

	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Total	12	10	8	30
Boys	4	6	5	15
Oldest child	9	7	8	24
Mean child age in years, months (range)	7,4 (6,10 - 8,0)	7,1 (6,6 - 8,3)	7,1 (5,7- 8,3)	

Table 4
Parent sociodemographic information by parental schooling level

	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Total	12	10	8	30
Fluent in Spanish	3	7	6	16
Fathers	0	2	1	3
Mean parental age in years (range)	31.3 (22 - 50)	36.1 (26 - 46)	29.0 (25 - 34)	

Family Composition, Language Exposure and Occupational Backgrounds by

Parents' Schooling Groups. As can be seen in Table 5, the majority of the participants lived in a nuclear family arrangement consisting of two parents and their children (17/30). This family composition was the most common in the three groups of schooling. Other family compositions included two parents who lived either with the father's or the mother's extended family (parents, siblings, and their children); mothers who lived with their extended families without the children's father; and mothers who lived alone with their children. The three fathers who participated in this study lived with the child's mother. There were no statistically significant differences on the average number of children between these three groups, $F(2, 27) = 0.09$, $p > 0.10$.

Table 5
Family composition by parental schooling level

Family composition	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Nuclear family	7	5	5	17
Extended family with spouse	1	2	2	5
Extended family without spouse	4	2	1	7
One parent and children		1		1
Mean number of children, range	2.5 range 1 to 4	2.7 range 1 to 5	2.6 range 1 to 4	
Total	12	10	8	30

In terms of language exposure, in roughly half of the families (14 of 30) the child was only exposed to K'iché at home, though this was far more common amongst unschooled than schooled participants (see Table 6).

Table 6
Children's language exposure by parental schooling level

Language exposure	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Only K'iché	9	3	2	14
Both parents speak in K'iché and Spanish	1	5	3	9
One parent speaks only in K'iché and one parent in Spanish and K'iché	2		2	4
The parent speaks in Spanish other adults in K'iché		1	1	2
One parent speaks only in K'iché and one parent only in Spanish		1		1
Total	12	10	8	30

As can be seen in Table 7, with the exception of one mother who had 12 years of schooling and worked as a shopkeeper, all of the participating mothers had occupations that did not require schooling or fluency in Spanish (i.e., weavers and housekeepers), even if they had attended school. Participating fathers were either farmers and traders of traditional skirts (*cortes*). Most of the spouses also worked in occupations that did not

require schooling or fluency in Spanish (i.e., weavers, housekeepers and farmers) even if they had attended school; with the exception of one wife and a husband who worked as teachers, an occupation that required 12 years of schooling until recently. See Table 8.

Table 7
Participants' occupations by parental schooling level

Participants' occupation	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Weavers	5	7	2	14
Housekeepers	7	1	4	12
Farmer		1 ^a		1
Trader		1 ^a	1 ^a	2
Shopkeeper			1	1
Total	12	10	8	30

^a Participant was a father.

Table 8
Other caregivers' occupations by parental schooling level

Other caregivers' occupation	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Weavers	2	1		3
Housekeepers		1 ^a	1 ^a	2
Farmers	5	2	1	8
Bus attendant	1		1	2
Construction			2	2
Traders		2		2
Seller in a store		1	1	2
Barber		1		1
Teacher		1 ^a	1	2
Total	8	9	7	

^a Wife of a participating father.

Data Collection and Analysis

This study used a constructivist grounded-theory approach (Charmaz, 2003). This approach allows for refined research questions and more purposeful data collection as initial analyses inform subsequent round of data collection and analyses. The first round

of data collection consisted of a semi-structured interview and a book-sharing activity³. The second round consisted of a semi-structured interview and a discussion about two different types of books. There were two analyses phases. In what follows I describe each of these activities sequentially, paying particular attention to the ways in which the initial analysis broadened the focus of the study and informed the questions and the discussion activity that were used during the second round of data collection.

First data-gathering round. The initial round of data gathering took place before the implementation of the first parent workshop. This round consisted of a semi-structured interview and a book-sharing activity. Given the initial focus of this study on Mayan parents' role in supporting their first-grade children's literacy development, the initial interview focused on the parents' understanding of language and literacy development and the specific activities that they engaged in to support their children in learning to read. The major topics covered during this interview were: a) family background; b) child daily routines and parent-child interactions; c) children's language development; d) children's literacy development; f) parents' activities in helping children to learn to read; e) parents' own schooling experiences (see Appendix 1 for the full protocol).

This interview was conducted during the first weeks of the beginning of the school year (late January and early February) and took place either in the parents' home ($n = 16$) or in a quiet room at their child's school ($n = 14$). I conducted the interviews by myself with parents who expressed feeling comfortable conducting the interview in Spanish ($n = 9$), and with the support of one of two interpreters with parents who preferred to speak in K'iché ($n = 21$). One of the interpreters was a professional linguist

³ This activity is analyzed in a separate paper.

with previous experience interviewing adults in different research projects, and the other was a university student in his sixth semester of Applied Linguistics who had recently worked gathering survey data with families. Both of them were native speakers of K'iché and identified themselves as Mayans. The interviews ranged from 46 to 110 minutes.

The audio-recordings were fully transcribed by a native Spanish speaker in the nine cases in which the parent spoke in Spanish and by the two interpreters directly to Spanish in the 21 cases in which the parents spoke in K'iché. In instances in which the parents said a word originally in Spanish the interpreters identified the specific words by using cursive letters in the transcript. I verified the nine Spanish transcripts and the two interpreters verified transcripts for each other.

Initial analyses. The primary means of analysis during the initial phase was grounded-theory coding in which emic codes emerged from the participants' language (Charmaz, 2003; Strauss & Corbin, 1998). The two interpreters and I engaged in a process of open-coding of two randomly selected transcripts. In line with the initial focus of the study we read each of the two transcripts thoroughly and created codes intended to capture parents' understanding of language and literacy development, and the specific activities that they were engaging in to support their children in the task of learning to read. Once we had completed this process independently, we met to have a collaborative discussion about the naming, relevance and specificity of the codes that we had created, and the similarities and differences that we identified between these two parents and other participants which we had interviewed. This discussion lead to a shift in the focus of the study and the addition of a practical activity intended to get more refined data than

the one we obtained through the original interview questions. In what follows I discuss the emergent themes that led to these changes.

Broadening of the focus: benefits of formal education for children's future. Some of the emergent themes from the preliminary analysis called for a broadening of the focus of the study. Even though the original interview protocol did not include a focus on parents' beliefs about the benefits of formal education for children's future, these beliefs emerged as a central theme during the initial phase of analysis. When discussing the difference between people who "know how to read and write" and those who don't, many parents emphasized the ability to engage in conversations with Spanish speakers like doctors or government representatives, rather than mere interactions with written language as originally intended by the question. Through discussions we came to realize that the participants were equating "knowing how to read and write" with "having attended school", the place where most children in these communities learn to communicate in Spanish. The theme of the role of formal education for children's future was also present in the emic code "que no pase lo mismo que yo" [that he/she does not go through what I went through]. This code captured the parents' desire for their child to have a different experience than their own and was often connected to their desire to provide their children with more formal education so that they could obtain a better job, speaking once more to the benefits of formal education for their children's future. In their answers to interview questions about how they helped their children to become a good reader, the parents were also going beyond specific activities to address a broader topic of general commitments towards schooling, such as buying school materials or shoes so that

their children could attend school, or providing their children with more time to do homework.

Guided by these broader emergent themes, I decided to expand the focus of the study from an exploration of specific activities to support children in learning to read, to exploring parents' beliefs about formal education for their children's future and the commitments they made to support children's schooling more generally. In line with this new focus I included an open question about parents' hopes and dreams for their child's future and the role that parents perceived playing in helping their children attain these hopes and dreams. This broader question allowed obtaining new data to test initial interpretations of the benefits assigned to formal education for children's futures, while opening the possibility for alternative perspectives on the parents' vision for their children's futures which may not have emerged with the more narrowly focused questions that I asked during the initial interview.

A different approach to get at "reading". The first round of analysis also evidenced an interesting misalignment between the underlying definition of "reading" in the interview questions and the parents' and interpreters' tacit understanding, which called for a different way of gathering information than the use of abstract questions. Many parents answered the questions on whether they were used to "reading" with their children or whether they had "read" with their children before they started attending school affirmatively; however, during the initial round of analysis it became clear that some parents were referring to activities such as checking children's homework or teaching them how to trace letters as "reading". Neither the parents, nor the interpreters, differentiated these activities from my tacit understanding of "reading" with children (i.e.,

parents and children looking at books and engaging in conversations around them). In order to go deeper into the parents' tacit understanding of "reading" I added an activity to the second interview in which the parents were asked to examine a primer as the ones used by teachers in the first grade and a storybook from the program's Book Bank. After examining the texts, parents were asked to determine the age at which it would be appropriate for a child to use the primer and the storybook on his or her own and the age at which it would be appropriate for a child to listen to an adult read the storybook to them.

In sum, the initial analysis resulted in a broadening of the focus of the study and the inclusion of a practical activity to purposefully seek new data that built upon the emergent themes (Charmaz, 2003).

Second round of data gathering. The second data gathering round consisted of a semi-structured interview with the additional question on parents' hopes and dreams for children's future; questions on the parents' perceptions of change in their interaction with their children and their opinions of the Leer Juntos, Aprender Juntos first and second parent workshops; and the discussion activity described above. For the purposes of this study I only draw from the question on children's future, questions regarding change in interactions with print materials and the discussion activity. Questions regarding parents' opinions of the workshops were analyzed separately in a report for the program.

This second round of data gathering activities took place in April and May. Three of the parents discontinued their participation in the study at this time. One mother, who had a first grade education, was excluded from the study because after the first weeks of school she was told that her child needed to repeat kindergarten and thus she would not

be able to participate in the parent workshops. One mother, from the group of mothers with no schooling, and one father, with a third grade education, stopped participating due to lack of time. The second interview took place either in the parents' home ($n = 18$) or in a quiet room at their child's school ($n = 10$). In this round 8 interviews were conducted in Spanish and 19 in K'iché.

Second round of analyses. For the second round of analysis I coded all of the initial interviews and the follow-up sections from the second round of interviews independently using the qualitative data analysis software tool NVivo (Version 10; QSR International, 2012). Following Strauss and Corbin (1998) I engaged in a constant process of comparison across and within the emergent codes to identify larger themes and more refined categories. For example, some of the specific codes on the benefits of formal education like “traveling”, “going to the doctor” and “legal processes” were combined under the theme “navigating and establishing connections with the world outside of their communities”. The initial code of “que no pase lo mismo que yo” was subdivided into two specific categories as follows, parents' desire for their children to have a different experience than the one they had, and the specific commitments in which this desire was being realized (e.g. making financial investments for formal education, providing time for homework, providing help with homework, etc.). Other broad codes like “supporting homework” were subdivided into the more specific codes “testing knowledge/quality control”, “answering questions/providing help”, “learning together”, and “encouraging”.

In line with a constructivist approach to qualitative research, rather than attempting to capture a single reality, I aimed at understanding the participants'

portrayals of their experiences, with particular attention to multiple viewpoints within the data (Charmaz, 2003). I also attempted to avoid representing participants' realities from my solitary standpoint, by engaging in constant reflection and collaboration with my colleagues and my advisor. During the data collection phase I had numerous conversations with the two interpreters regarding my emergent understandings and the connections I was drawing with previous studies. As described above, these conversations helped to bring light to the participants' (and my own) tacit assumptions. Throughout the process, I also wrote up analytic memos to organize the emergent themes and make connections to the concepts from the theoretical framework and previous studies (Maxwell, 2005). I shared these memos along with specific examples from the data with four colleagues who helped me identify specific ways in which my subjectivity was shaping my understanding of the data and challenged me to consider alternative interpretations. In the final phase, I shared drafts of the report with my main advisor who encouraged me to go deeper into the analysis by asking questions intended to make the connections that I was drawing more explicit and enrich the examples I was providing by adding more detailed contextual information. The discussions with the two interpreters, my colleagues and my advisor brought alternative voices and viewpoints to the analysis, bringing this study closer to Charmaz's (2003) call for empirical research that is more reflexive and completed studies that are more contextually situated.

Results

Analyses of parents' responses revealed a number of themes in parents' beliefs about the benefits of formal education for their first-grade children's future. First, formal education was seen instrumentally by participants as the avenue through which their

children could gain benefits for communicating, navigating and surviving the world outside of their communities; gaining access to salaried jobs; and improving their participation in governance mechanisms within their communities. Second, this instrumental view was often accompanied by a sense of the psychological benefits of attaining higher levels of formal education for children and for the parents such as the promise of avoiding feelings of sorrow, fear, embarrassment, and frustration and humiliation associated with limited education stemming from a system in which personal value is equated with one's position in the academic-occupational prestige hierarchy. Third, even though all participants expressed the belief that formal education would benefit their children in the future, there were differences in their long-term expectations for their children's educational milestones, with some parents expressing that their child would be the one to make the decision of how far to advance in the formal educational system. Fourth, some parents expressed that formal education may have some negative consequences for children, such as becoming arrogant and forgetting their duty to others, as well as some limitations (e.g., one can have formal schooling and still act in immoral ways).

As expected within a society moving towards more *Gesellschaft* conditions, parents' made various commitments to supporting their children's schooling by investing their financial resources and time. Investments of time consisted in three major categories: supporting school attendance; integrating homework into family routines; and engaging children at home in activities that support school learning. Activities to support children's schooling ranged from infusing schooling with meaning by sharing their own personal stories of pain, regret and humiliation due to their limited educational

opportunities, to activities intended to develop children's basic code-based literacy skills, such as teaching children how to trace letters and numbers. Notably, even though many of the parents were able to read, few parents engaged in interactions with texts with meaning such as Bible stories or news papers which could potentially foster children's conceptual knowledge of literacy and oral language development before children entered school, and preferred to focus on teaching isolated features of language such as the names of letters. Furthermore, in cases in which the parents looked at newspapers or the Bible before their children entered school, these activities were put aside to privilege homework once the child entered school. In the four communities, homework activities were the most common contact that children had with written language.

Compared to parents with no schooling, parents who had attended school were not more likely to express academic-occupational beliefs regarding the benefits of formal education for their children's future. Parents who had attended school and those who had not expressed their commitment to their child's education through the investment of financial resources and time, and all parents were engaged in activities at home to support their children's learning. However, as expected, mothers with fewer years of schooling were more likely to express that they lack the ability to support their child in text-based activities.

Parents' Beliefs about the Benefits of Formal Education for Their Children's Future (RQ1)

Participants in this study endorsed an instrumental view of formal education as the means that would allow their children to navigate and connect to the world outside their communities, access better occupations, and improve their participation in

governance mechanisms within their communities. Perceptions of these instrumental benefits were often accompanied by a sense of psychological benefits such as avoiding feelings of fear, shame, pain, embarrassment and humiliation stemming from a lack of educational opportunity for both the children and the parents as they supported their children's formal education.

School as enabling communication outside the community: Preparing children to navigate and survive in the outside world without fear or shame. The most common benefit of formal education for children's future, reported by 23 parents from across the three schooling levels, was the possibility of establishing connections with the world outside of their community through activities which required basic reading skills and a proficient command of Spanish. The activities mentioned included, for instance, traveling outside of the community and being able to find one's way around; communicating with "Ladinos" (e.g. doctors, nurses and teachers who did not speak K'iche); and/or carrying out bureaucratic tasks at the town's municipality, without depending on the assistance of other people. Rogoff and colleagues' (2005) study documented Mayan children's identification of learning Spanish as one of the main benefits of attending school in 1976 and in 1999. The authors interpreted this view as connected to occupations in commerce which require traveling and establishing connections with Spanish speakers from outside the village. More recently Ishihara-Brito (2013) found that parents associated schooling with the ability to communicate in Spanish. This study provides further evidence of generational change by showing that just as children in the late 1990s in San Pedro and parents in four departments in the 2000s, Mayan parents from these four communities in el Quiché in 2015 also value

formal education as ensuring children's ability to communicate in Spanish. It extends the findings of previous studies by showing the importance assigned by parents to the skill of communicating in Spanish, not only as connected with occupations in commerce but as a fundamental skill to navigate and survive the world outside of their communities and to interact with professionals such as doctors or bureaucrats in town without fear or embarrassment associated with a lack of schooling.

Seven parents perceived that they had acquired the necessary skills to establish connections with the world beyond their communities through their own schooling, and expressed a desire for their children to have such experiences. For example, Tomás, a parent with a third grade education who had a good command of Spanish, talked about his experience of traveling to the capital city with his father and being able to navigate the city because he knew how to read. He used this experience alongside with the promise to also take his children there someday as a way to encourage them to continue learning ⁴:

Tomás: I personally sometimes say, I'm already a bit old, maybe I do not see very well. But you, you have to learn, right? But as I told both of them, knowing how to read and write, having the strength and energy to go wherever you want. Personally, I travelled to the capital with my father and he said "here is the terminal of Guate", "very good" [I said]. It is like this that I am encouraging them, someday I'm going to show them Guate, and I ask them: "how are you going to know the avenue, know the street, how will you know the zone? If you do not know how to figure out what a zone is, what a street is, well one remains lost in the capital. They must know what is best, because I often tell them "talk more" it is nice to master Spanish wherever you want [to go]⁵.

⁴ All parents' names are pseudonyms. Translations into English were done by the author from original transcriptions in Spanish. Quotations in Spanish can be provided by the author upon request.

⁵ Brackets are used to add words that were not said but could be implicitly understood required by the reader to understand the content.

Tomás' account points to the importance that he assigns to being able to read environmental print when one travels to the city. When children are engaged with print in their everyday environments they develop knowledge about the functions and uses of print, a process known as "environmental print awareness". While in the three communities there was some environmental print in the businesses of the community (i.e., signs of products), there was not much print in the children's surroundings. By sharing with his children this particular use of print in the capital city as fundamental to find one's way around, Tomás made a conscious and deliberate effort to provide his son with an understanding of the functions and meaningful applications of literacy.

On the other hand, 15 parents talked about the psychological benefits of formal education for their children's future in relation to their own sense of frustration about not having developed sufficient reading skills and/or command of Spanish. For example, Felipa, a mother with a second grade education who was able to read but did not feel comfortable speaking in Spanish, identified the limitation of interacting with health professionals as an important reason why she decided to provide her children with more years of formal education than what she was able to attain:

Felipa: It's necessary [to give them studies] because it's like what we are living now, that we just have a second grade and sometimes there is someone who is sick, one is afraid to enter the hospital or the doctor, because one cannot explain the disease they have. That is why school is so necessary. However, if one can do well with *castilla* [Spanish], one is not afraid to talk and go inside, to a doctor or anywhere, because you can speak Spanish well. And there is the importance of school. That is why we gave the older ones, although it was only primary what we gave them, but they had their sixth grade, which is more than ours, only second grade. They have a little more knowledge about some things.

In this mother's view one of the central benefits of schooling for children's future was the opportunity to develop proficiency in Spanish, a benefit intimately connected to

the possibility of communicating with others outside the community without fear of not being able to communicate effectively in Spanish. Eleven other parents also referred to feelings of fear, embarrassment, preoccupation, and/or sadness caused by not being able to read or communicate in Spanish and expressed their desire that their children would not have these same experiences. The ability to communicate in school-sanctioned ways is fundamental for critical matters of life outside of school such as access to health care services (LeVine et al., 2012), and this is particularly true in Guatemala, a country where the majority of the professionals and bureaucrats who serve Mayan communities are unable to communicate in Mayan languages. In this sense, formal education can provide children with a sense of confidence or security to carry out activities which they are not able to carry out for themselves as they increasingly demand skills which they may not have developed due to their limited schooling such as communicating in Spanish or being able to decode written language.

School as a way out of pain, embarrassment and frustration: Preparing children to get a job so they can “defend themselves” and “get far in life”. The second most frequent benefit of formal education referred to the opportunity to access a salaried job, which may or may not require academic credentials. Seventeen parents expected that their children would attain “more studies” (“más estudio”), “proper studies” (“un buen estudio”) or a “degree” (“título”) in order to be able to obtain a job. Teacher was the most frequently mentioned occupation (8 parents), followed by doctor (5 parents), lawyer (3 parents), nurse (2 parents), working at a bank (2 parents), and

salesman (3 parents). Occupations which were mentioned by only one parent were engineer, veterinarian, accountant, secretary, and fireman and barber.⁶

While the parents may have had regular contact with people who hold these positions either in their communities or in the central town of the municipality, these jobs are still largely out of the reach of members from their own community. In speaking about their aspirations for their children to have one of these jobs, only three mothers made an explicit reference to someone they knew personally who had attained a position as a result of their studies. Anabela, who aspired for her child to become a teacher, referred to the teacher of the school as a member from her community who was doing well. Jessica mentioned that her younger child would sometimes say that he wanted to be “like Alberto, the school principal” when he grew up. Cecilia referred to her classmates from when she attended the first three grades of primary school, who now worked in a bank. With the exception of these three mothers, the parents referred to “people” in general with expressions such as “I hope that she has a job like those who study, like the teachers” or “those who have jobs”. The use of the word “trabajo” in Spanish or “chak” in K'iché was not used to refer to the parents’ own work in farming, weaving, the production of indigenous crafts, or household work, signaling that these were not considered as “jobs” or desirable future occupations for their children.

It is likely that the parents may not have actually known any specific individuals who had followed the pathway from formal education to salaried positions. Education beyond the 6th grade is only offered in the urban center of the municipality. Thus, for children to continue to middle school their parents need to bear the cost of daily travel to

⁶ Fifteen parents mentioned only one job that they or their children considered as possible future jobs and seven of them mentioned more than one job.

the municipality's urban center or tuition in a private boarding school. Not surprisingly attainment of a high-school education has been and continues to be limited in the four villages. In 2002 the rate of attainment of a high school education ranged between 1% in the Mountain village and 5.5% of in the Road village. In 2015 the net enrollment rate in the last three grades of high school, called "diversificado," was only 7.63% at the municipal level. Given that this figure includes the urban center, this level is expected to be higher than in any of the 4 villages. Among the participants of the study and their spouses, only 3 people out of 53 (5.7%) had completed 12 years of education. The majority of the parents (42 of 54 or 77.8%) were occupied in jobs which did not require any schooling such as farmers, housekeepers, weavers and construction workers. A few (10 of 54 or 18.5%) had positions which required skills to communicate in Spanish and basic literacy such as bus attendant, merchant, shopkeeper, salesman or barber; and only two of the parents (3.7%) occupied a position which required more extensive formal education. The spouses of two of the participating parents had jobs as primary school teachers in a different community from their own. While this occupation was the one that required the most extended formal education, at the time in which these parents obtained their jobs as teacher they were only required to have completed a diversificado degree (i.e., 12 years of schooling vs. a five year university degree that is required today).

In this context, parents' aspirations for their children to obtain a "degree" (título) or becoming a "professional" (profesional) did not necessarily imply intensive and extended formal education. Parents who expected that their children obtained a "job" did not make the distinction between jobs which required a university degree (e.g. doctor, lawyer, veterinarian, and more recently teacher), from those requiring a technical high-

school (e.g. nurse, accountant, bank clerk or secretary) or in the case of one mother even from those requiring other types of training (e.g. salesman, fireman and barber). It thus seems that parents' understanding of desirable occupations referred to those in which the children could earn money in non-traditional occupations. For example, Cecilia identified as her main aspiration for her child to become "a professional" and included as examples being a teacher, an accountant, a nurse or working at a bank. Jessica also hoped that her daughter would be a "professional"; she shared that her daughter had expressed the desire to be a veterinarian or a teacher, and she and her husband had also suggested that she could become a lawyer, a nurse or a secretary. While the word "profesional" is often used in Latin America to refer to people with a University degree Cecilia and Jessica did not make this distinction by including professions that do not require University level education as part of her aspirations. Feliciano said she wanted her child to be a teacher, a lawyer or a salesman. Advertina's child wanted to become a fireman, and his parents had suggested that he could also become an engineer, which was what his cousin wanted to study, or become a barber, like his father. In this sense, the meaning of obtaining a "degree" (título) or becoming a "professional" (profesional) should not be understood necessarily as obtaining a university degree, but rather as attaining the necessary training that will allow children to have a salaried position. This lack of distinction was present even amongst parents who had attended school.

Just as the benefits of formal education to navigate the world outside of their community were framed in terms of the parents own limitations, the benefit of formal education to attain a salaried position was also framed in relation to their frustration about having been unable to access more educational opportunities.

In speaking about the experience of not being able to begin or continue their education the parents referred to feelings of pain [*dolor/k'axk'olil*], sadness [*tristeza/b'is*], regret [*me arrepiento/k'ax kina'o*] and even humiliation [*me sentía humillada/k'o ta nutatan*]. The type of sorrow experienced by some of the parents is vividly conveyed in Jessica's narrative of her experience of not having been able to attend school because of her family's harsh economic situation. This mother never enrolled in school and at the age of 12 she left to work as a maid in the capital city while her younger siblings stayed home and attended school. Her narration of the conversations she has had with her mother, her sisters and her husband throughout the years clearly illustrate the pain involved in this situation:

Jessica: So I could not [go to school], I wanted, I wanted and my cousins went, they all went and I didn't. Then I say, "My God". Sometimes I say "Mom, why did you not you get me in school?", "I do not have money" she said, "But I want to go", "I do not have money". Then one becomes pensive, why does one go through these things, "why?" I ask my mom, "put yourself to work," (laughs), I told my mom. And she told me "I put myself to work, *mamita*, but I don't earn enough, I do not earn enough to give you what you want" (...) sometimes I cry with my mom, I cried a lot with my mom and I tell my sisters, "ah" is that I tell my sisters, "be grateful, my mom goes around bursting herself working, she works in the field, works washing clothes, working on whatever" I tell my sisters, "no, you be grateful that my mother could give to you, although you did not go far but at least you reached sixth, fifth [grade], look at me" I tell my sisters, "I was not given anything". My husband knows, sometimes I start to cry and he tells me "leave it there, leave it there, I'll help you", he says, and he has helped me a lot, since we got married.

Gladys shared a similar experience of sorrow for her interrupted education. This mother had the opportunity to finish the first grade and enroll in the second grade, but she was forced to drop out after her father died. Her mother was not able to continue sending Gladys or any of her siblings to school, so instead, she sent her kids to work in a sugar

cane plantation. Gladys saw that her lack of studies prevented her from finding a job and caused her feelings of suffering, sadness, and a sense that she could not “defend herself”:

Gladys: as I say, as mothers we have struggled a lot because we do not have studies, we do not find work, that is why I want to help my daughter, and as we are saying, we hope that God gives us life so that they do well with their grades, and that they are not like me, that I do not know anything. It is true that I have food, but I feel that I suffer in relation to where I am, I do not have studies, I cannot defend myself, because my dad died, and I think that if he had not died they would have given me studies, so I feel sad.

The expression “defenderse a uno mismo” (“defending oneself”) is commonly used in Guatemala and in other Latin American countries to refer to a person’s capacity to attend to their economic needs without relying on others. Within communities that have moved away from an agrarian subsistence economy to a cash-based economy, individuals’ capacity to “defend themselves” has become increasingly tied to their ability to communicate with bureaucrats and service providers and participate in economic activities beyond the household unit and communicate with bureaucrats and service providers. This requires, at a minimum, proficiency in the Spanish language and in some cases basic literacy skills (as in the case of people who become involved in commerce), and ideally the attainment of academic degrees that will open the opportunity to occupy a higher position within the academic-occupational prestige hierarchy (as in the case of Gladys’s hopes that her child will become a teacher). In this context, even though Gladys was able to feed herself (“I have food”), she still felt that due to her lack of formal education she was unable to “defend” herself. She expected that through education her children would be different from her (“that they are not like me, that I do not know anything”) and avoid the struggle, suffering and sadness that she has experienced.

These mothers' feelings of pain and personal frustration stood in contrast to the excitement and hope they expressed as they talked about the aspirations for their children's future in which formal education was seen as the main key for achieving them:

Jessica: I dream for my daughter, I have dreams for her to get far, to get far, although I could not do that [get far] but now I dream for her I tell her "*mama*, we have to fight so you get far" and she tells me "*mama* I want to be a doctor or a teacher" and that excites me, in all truth it really excites me.

In Jessica's aspirations the words "llegar lejos" in Spanish [to get far] can be interpreted as the Spanish expression "llegar lejos en la vida" [getting far in life] which in this context also means occupying a higher position within the academic-occupational hierarchy –something which Jessica was not able to do herself because she did not have the opportunity to attend school. The prospective of her child attaining high levels of formal education was thus accompanied by the psychological benefit of seeing her child achieving the dreams that she could not fulfill herself.

Similarly, Gladys connected her own experience and that of her siblings of seeing their formal education interrupted to feelings of joy, happiness and pride that she would feel if her child fulfilled her hopes of success in school and the attainment of a teaching degree:

Gladys: If I had had my parents, I would have studies. That is why what I want for my children and my daughter is not to lose any grade or any year, and even manages to pass every grade and that she graduates as a teacher. That is my greatest desire as a mother, seeing even one of my daughters graduate, that is what will fill me with great joy and happiness, I do not have even a brother or a sister who has graduated, it would be an enormous pride to see a son or daughter graduate. Sometimes I hear the children from neighbors graduating and I say to myself, "my God and mine when will they graduate?"

Just as for Jessica, formal education for Gladys also had instrumental and psychological benefits of escaping feelings of pain, regret, and humiliation, and having

feelings of joy, pride and self-worth. On the one hand, formal education will allow her daughter to have a job as a teacher. On the other, Gladys hoped that the provision of the schooling opportunities that were denied to her after her father's death would prevent her children from experiencing the same feelings of suffering and personal inadequacy of not being able to "defend" themselves that she had experienced. In her vision of the future, those feelings of pain and regret stand in contrast with the feelings of joy, happiness and pride from seeing her children accomplish what she was not able to accomplish herself.

Feelings of pain for a lack of educational opportunities in connection to hope for children's educational attainment were also present amongst parents who had spent more years in school. For example, Benita, who had six years of education and was unable to continue after her mothers' death, referred to her feelings of regret and humiliation and her hopes for her child to have a different experience:

Benita: In my case I would say that I did like to study because I was in the first grade of *básico* when my mother died, and there was no way to study, my dad asked me to stay at home and I did not have any other option than to stay. There was no one who would fight for me, even though I had a father but I had to stay home. That is why I tell my daughter "I feel so much pain for not having sent you to school last year and it was only because of your two brothers, but take this seriously and you will see that you will pass your grades because when time goes by, one feels sorry. If you only stay at home it is hard to get money, you feel humiliated, on the contrary if you had a degree that is another thing. That was one of my dreams but (sigh) I did not have the opportunity".

The presence of psychological aspects in the parents' views of the benefits of extended formal education is consistent with the public morality inherent in academic-occupational systems, in which the realization of potential and of personal value is equated with the individual's position within the academic-occupational prestige hierarchy (LeVine & White, 1986). From the perspective of the participants who expressed frustration and a sense of frustration due to their limited educational

opportunities, the benefits of formal education were not restricted to increases in economic resources obtained through jobs which require academic credentials. These parents often referred to promises of avoiding feelings of pain, regret and suffering, which stood in contrast to the promise of experiencing excitement, happiness, pride and dignity actualized through schooling.

It is, however, important to note that while all the parents identified some benefits of formal education, not all of them aspired for their children to necessarily obtain a higher education degree that would allow them to occupy higher positions within the academic-occupational hierarchy. Nine parents who recognized the benefits of formal education to read and communicate in Spanish did not express the view that their children would have to attain a particular educational level. Furthermore, eight parents explicitly stated that they would support their children's formal education up to the point that their children wanted to continue. For example, Rosario stated that her hopes and dreams for her child were "that she continues with more studies as long as she wants to. If she wants, then she should continue up to the point where she wants to get".

In two cases the parents stated that, even though they aspired that their children would continue with their education, if their children did not like studying, they could always work in the fields, as their fathers did. Tomás' two older boys had decided to drop out of school in the fourth and fifth grade because they did not like studying and preferred to work in the fields with their father. While Tomás was hopeful that his youngest child would want to continue with his studies, he also shared that sometimes he agreed with his older sons' decision because their "fate" may be the same as his, being "a bit merchant, a bit from the countryside":

Tomás: Too bad that the two did not want to [continue with their schooling], but I wish he [his younger son] does, although sometimes I think they are right because fate does not want it, because everyone brings their fate. In my case I am from the countryside, a bit a merchant, a bit from the countryside, I do everything, and perhaps their destiny is like this, but hopefully he [his younger son] will go ahead.

A similar position was shared by Romelia who shared that she and her husband had considered the possibility of having their son work in the fields with his father due to their perception that their child did not like studying:

Romelia: A year ago we sent him to school but he did not want to go. This year we went to enroll him in the first grade and we will see what he will do. His dad says "if he will not continue, I will buy him a hoe and machete and he will go with me to work in the field." It is what we say about him, because it is like he does not like to study.

The view that the decision of how far to go in formal education ultimately depended on children themselves was even shared by some parents who had an opinion on the minimum level of education that they expected for their children. For example, Santiago reported that he expected his child would get at least a sixth grade education but explained that he could not tell him that it was "his obligation to study," particularly if he saw that he did not have the willingness to do so:

Santiago: I will not lie, I have not asked him [how far he wants to go], but what I have seen is that he is eager to be studying. If he decides to continue studying that's ok, and if not, I cannot tell him "it is an obligation that you have to study", seeing him unwillingly. But if he says that he continues studying, God willing we will be able to [support this education], and if not, I have told him "the important thing is to get your sixth grade and the most important thing is to talk in Spanish because when one has no studies, it is a shame because one cannot speak Spanish, then it is when one [feels] regrets, ok?".

For these parents children differed in their disposition towards school and it was this disposition that mattered in whether they would continue their schooling rather than their perception of utility of further schooling. In these parents' accounts there is a sense

that children have some characteristics that are ultimately beyond their influence. This is consistent with the widespread belief documented by Gaskins (1996) that children's development is a process that is largely independent of the influences of the adults who surround them and the sense that children should make important life decisions for themselves including their schooling, which is coherent with the deep respect for children's autonomy in Mayan communities (Chavajay, 2006; Gaskins, 1996; Rogoff, 2003). A recent study documented that rural parents from seven different ethnic groups in Guatemala documented grant children the power to make the decision on whether to attend school (even below the age of ten) and whether to continue to secondary school (Ishihara-Brito, 2013). These parents' belief that they cannot do anything if their children do not like school and their decision to grant them power over their own schooling, stands in contrast to the position taken by other parents in this sample. As I describe in later sections, parents in this second group believed that they could influence their children and considered limiting their child's autonomy to make the decision of whether to continue schooling as an important part of their responsibilities as parents.

Even in cases in which parents did not express an aspiration for their children to attain a particular level of education, formal education was still present in their discussions of their aspirations for their children's future. In contrast one mother did not make any explicit reference to formal education in speaking about her child's future. Dominga, a mother who saw her first grade education interrupted when her father died and she was sent to work in a coffee plantation by her mother who was unable to sustain her, hoped that her child could become a weaver of *güipiles* (embroidered blouses), a skill that she had not learned herself and that she considered important to make money.

While she shared the expectation that her child would have a different occupation and have a higher income than she did, she did not consider formal education as the avenue through which her daughter would attain this aspiration:

E1: What are your hopes and dreams for your daughter?

Dominga: Well what I want when she is a grown up is to have a job and help me with chores around the house.

E3: When you say that what you want for your daughter is that she has a job, what job do you imagine and what you would like your daughter to do?

Dominga: First is to learn and work with sewing, and how to make a güipil [embroidered blouse].

E3: In what ways do you help her so she can sew and make güipiles?

Dominga: Look for you someone to teach her this, because in my case I can't [because I do not know how to make güipiles myself].

E3: For what purpose does she have to learn to sew and make güipil?

Dominga: To get some money.

E3: Is there anything else you want for your daughter in the future?

Dominga: That she knows everything that relates to sewing.

While this mother expected that her child would have a better occupation than the one she had she did not refer to any benefits of formal education in the accomplishment of this aspiration. Instead, she referred to the benefits of out-of-school learning of the skill of weaving. Historically, embroidered blouses have been commissioned to the weaver by members from her own community for special occasions such as weddings, religious festivities, or important birthday celebrations. During the civil war that shook Guatemala from the 1960s until 1996, and was particularly devastating in the Guatemalan highlands during the 1980s, many women lost their husbands, turning weaving activities into the main source of household income. Non Government Organization (NGOs) and alternative trade organizations (ATO) intervened by organizing cooperatives to commercialize the widows' textile products both in local touristic and international markets (Joy, Lipke & McKay, 1992). The introduction of cooperatives changed the way of production and distribution of textiles as local, national and even international markets

have become accessible. Over the last 10 years the products have become diversified to fit Western consumers' tastes for "traditional" crafts. For example, some of the mothers in the Road village have specialized in producing table cloths which consist of scenes such as forests or mountains with animals which are embroidered with colorful wool in a piece of cloth, and some of the mothers in the Mountain village have specialized in woven balls, animals such as giraffes and elephants, and even characters from animated Disney and Pixar movies, using in this way materials, techniques, subjects and aesthetic conventions unknown to their own mothers. The new channels of distribution and the diversification of products have allowed many women to increase their income without having to travel to the central town. Within this new market, Dominga aspired that her child would be able to gain the skills that would allow her to make a living without necessarily having to leave the village and still be able to help her with household chores. Dominga's desire thus stands in contrast to the emphasis placed by many other parents in aspirations for their children to be able to navigate the world outside of their communities or to obtain higher paying jobs away from their village.

School as facilitating participation in community leadership: Literacy as increasingly important to play a role in community councils and church. A benefit of formal education less frequently identified by the parents was an increased facility to participate in community councils (i.e. COCODES) and church within their villages. In speaking about the benefits that they had acquired through their own formal education, two mothers identified being able to take more responsibility and help others when they held a role in the council. They also valued this experience as one that allowed them to increase their own literacy skills. In contrast, Tomás narrated his experience of feeling

low spirited (“desanimado”) when he participated in the council because he was not a professional. While these posts have always been and continue to be available for people who do not know how to read and write, the accounts of these three parents suggest that higher literacy skills are increasingly valued within these groups and thus formal education could provide benefits for their children’s future participation in these organizations. Nevertheless, only Fabiana, a mother who had not attended school, referred to participation in a council as one of the benefits of formal education for her child’s future.

Similarly, five mothers reported that an important benefit of their own education was being able to participate in their church either by reading passages from the Bible in front of others during mass, writing notes of gratefulness for thanksgiving masses, or holding a post within the church. The importance of literacy for participating in church was also evidenced by two mothers who identified that a time in which they wished to have better literacy skills was when they had been asked to read a Bible passage and had not been able to explain the passages to the congregation. Notably, while higher levels of literacy could have also represented a benefit in this aspect of life, no parents identified increased or improved participation at church as part of the benefits that their children could acquire through formal education.

Potential drawbacks and limitations of formal schooling: Fostering moral standards and traditional values of respect and reciprocity are tasks for parents.

While all parents recognized the benefits of formal education for their children’s future, four of the mothers also perceived some negative outcomes or limitations of formal education which they attempted to correct through their advice and good example. For

example, Feliciana desired that her son gained higher levels of education so he was able to communicate effectively in Spanish; however, she warned her child against believing that he was “more” (i.e. better) than other people because he knew how to speak in Spanish:

Feliciana: (...) That's what I want for my son, I always tell him, "When you meet someone who speaks only Spanish, talk to him in Spanish and if you find someone who speaks only the K'iché, talk to him in K'iché, not because you speak Spanish and now you think you are more than them", "okay" he tells me.

Similarly, in speaking about her aspirations for her child to become a lawyer Mariela warned against the risk of her child becoming arrogant by believing he was better than others. Instead she wanted him to continue to be a “better person” and help others as she and her husband did:

Mariela: I always will continue to guide him in life to be a better person, and not because of his studies, he is going to believe he is superior to others. He must also learn to help others (...) it's the same as we do now, even though our [economic] capacity is less, we help others.

These mothers' perceptions of the arrogance that may accompany greater formal education are well supported by a system that increasingly equates a person's value with the position that they occupy in a hierarchy that is largely determined by educational attainment (LeVine & White, 1986). In addition, as the economic model in Mayan villages moves further away from productive activities based on intergenerational reciprocity and filial loyalty, towards wage labor not defined by kin or locality, individuals may also become less inclined to uphold previous obligations towards other members of their families and their communities. These mothers expressed academic-occupational values by desiring that their children attain higher levels of formal

education, while maintaining the desire that their children continue to uphold traditional agrarian values of respect and reciprocity.

Micaela also warned against a different potential negative consequence that could come from gaining a position working in government. In speaking about her expectation for her child to have a job as a salesman in a store or in the local government (la Municipalidad), Micaela emphatically added that they did not want him to “get used to stealing”:

Micaela: The work that I want for him is like the work of some people who work in Electra [a shop that sells house appliances] or in the municipality, although there are other different jobs, we just do not know and that's what we wish for him. We would not like for our child to become used to stealing, we want to teach him the good path and we do not want him to go on other non desirable paths or on the wrong path.

Her fears may be related to the numerous corruption scandals in which government officials have been quite literally caught stealing. Micaela believed that formal education will not provide her child with a moral compass to keep him on what she called el “buen camino” [the good path]. This same view was shared by Advertina who considered that some people could study and still “deviate” and “follow the wrong paths”:

Advertina: (...) Because we are evangelicals we are also going to help him with prayer, so that he does well, and that he does not follow the wrong paths, because we see young people who continue studying but they deviate and do things that are contrary to what one should do.

This idea that formal education may have some gaps which need to be bridged through parents’ attention to their children’s moral development, is different from the interconnectedness between moral values and academic success that was present amongst Mayan and ladino parents raised in rural areas in Guatemala (Ishihara-Brito, 2013) and

first-generation immigrants who were raised in rural communities in Mexico and Central America during the 1970s (Goldenberg & Gallimore, 1995; Reese et al., 1995). Parents in Guatemala described good education as moral guidance. First-generation immigrant parents from Mexico and Central America did not draw a clear distinction between schooling (academics) and upbringing (morals) when speaking about their aspirations for their children's future occupation. Furthermore, when the parents in Goldenberg and colleagues study were pushed to differentiate between these two aspects and speculate which was more important for children's future success, 28% of their sample insisted that academic achievement and moral development could not be separated and a larger proportion (44%) subordinated academics to moral development.

In contrast to these previous studies, only three of the participants in this study expressed the view that moral development, and more specifically obedience and dutifulness, was the basis for their children's future success when speaking about their aspirations for their children's future. For example, Francisca hoped that her child "finds goodness" [*encuentre el bien/kuriq utzil*] and finished her studies. She explained that the way in which her child will "find goodness" is by being obedient, hard working and doing what she is asked to do:

Francisca: What I say is that she should find goodness and succeed in her studies, as she says, now she wants to continue studying and wants to be a teacher. God willing, if she continues, she will surely find wellbeing and that's what we want and what we wish for her, so she can have a job as time passes.

E3: When you say, that she finds goodness or well-being, or when you say you want your daughter to achieve well-being in being life. What do you mean?

Francisca: That she is obedient, hardworking and does what she is asked to do and only then, will she find goodness. In this way she is happy and so are we.

This mother's emphasis on her expectation for her child to be "obedient" and that she "does what they ask her to", stands in contrast to other parents' views on their lack of

ability to make their children do something which they do not want to do, such as continuing to be in school. Nevertheless, these two views are not mutually exclusive. In her ethnographic work Gaskins (1996) observed that while children were allowed to make many decisions on their daily lives even if they may affect their future well being, their parents also expected obedience in other aspects such as contributing to work or showing respect and responsibility towards others. In this case it seems that these values of obedience are also extend to schooling as Francisca perceives that by doing what she is told, her daughter will be able to attain her aspiration to be a teacher.

In sum, over half of the participants saw the benefits of formal education as allowing their children to attain a paying job. Nevertheless, parents did not necessarily distinguish between occupations requiring higher educational credentials and other types of jobs. This may be related to the parents' lack of relations with individuals who have actually gained a position as a result of their attainment of higher education. Interestingly, even parents from the most remote community, who arguably are less likely to personally know someone with a higher educational degree, expressed their desire for their children to become "professionals". Parents' views of the value of educational attainment were also psychological, as many framed their aspirations for their children's future in relation to their own feelings of personal deficit, and saw their children's educational attainment as a way to avoid the feelings of fear, pain, regret, embarrassment and humiliation that they had experienced within a system in which personal value has become increasingly tied to the position within the academic-occupational hierarchy.

At the same time, many parents continued to express traditional Mayan values by displaying a deep respect for their children's autonomy in making their own life decisions

and by including values of respect, obedience and duty towards others as part of their aspirations for their future. While all of the parents recognized some benefits of formal education for their children's future, almost a third of the participants did not include the attainment of a degree or access to salaried jobs as part of their aspirations for their children either stating the view that children would be the ones who would ultimately make these decisions for themselves and in one case identifying an alternative way through which the child could access a better job (e.g., developing skills as a weaver). In addition, as formal education spreads and becomes more associated with life-course success in these four Mayan communities, some of the participating parents expressed some fear of loss of traditional values and moral development.

Parents' Commitments to Support Their Children's Formal Education (RQ2)

Investment of financial resources: the struggle and sacrifice that parents make to provide children with what is necessary to attend school. As expected in communities moving towards more Gesellschaft conditions, parents' investment of financial resources in their children's schooling was identified as one of the main parental commitments to formal education. Nearly half of the parents (14 of 30) identified buying the necessary materials as one of the main way in which they were supporting their children's schooling. This view was expressed by parents from all schooling levels, as well as by parents who aspired that their children attain a university degree and by parents who expressed that it was ultimately their children's decision how far to go in their schooling.

As suggested earlier, for many parents the commitment to send their children to school involved a conscious decision to avoid repeating their own childhood experiences

of not having been able to attend school or having seen their education cut short. By distancing themselves from some of the values that were transmitted by their parents, these parents were making an adaptation at the level of cultural values (Greenfield, 2009). Nevertheless, this shift in cultural values took place in a context of persistent economic and social exclusion of indigenous populations which placed significant barriers for its enactment.

As in many other low and middle-income countries, even though Guatemala established the gratuity of schooling in 2008, school is certainly not free. As described by the participants, the costs of sending a child to school include basic expenses like school supplies, uniforms and shoes. The minimum yearly expense to send a child to the first grade ranged from an estimate of 800 Qtz (\$106 US) made by one mother in the Road village to an estimate of 1,230 Qtz (\$164 US) made by a mother in the River village. These expenses are usually higher, as school materials and uniforms usually need to be replaced before the school year is over, and there are many other additional expenses like quotas for school repairs or special celebrations. Taking into account these “extra” expenses the cost of sending a child to the first grade ranged from roughly 160 Qtz (\$21 US) per month in the Road community to 200 Qtz (\$26 US). At the low end these estimates consist of more than three quarters of the monthly earnings of a weaver who usually can make around 200 Qtz per month (\$26 US), at the high end of the school expenses estimates they are the totality of these earnings.

The myriad of costs associated with sending children to school, threaten the parents’ desire to send and keep their children in school. For example, Feliciano lamented not having continued in school, a decision which she attributed to her own lack of interest

in school and her interest in working, though it is clear that her father's death and the economic needs of her family played a substantial role in her decision. She claimed that what she wanted "the most" was for her son to go further with his studies:

Feliciana: What I want the most for my son is that he goes further with his studies, that is what I tell him "continue your studies, I as a mother, I do not have much studies, but it is not because my mother did not want it but it was I who did not want to go to school and it was because my father died when we were very young, I thought it myself, it was my own thinking. My mother would have fought with us if we had gone. Maybe it's also because I did not like it, and as I could do some work I got carried away by that. I see that studies are indispensable; it cannot be that I do not have studies, and then you will be the same, this will not be good. Although I did not want to study, you have to do it".

Just like many other parents, Feliciana openly talked about her lack of formal education and connected it to her hopes for her child's future. At the same time she also shared that the financial costs that she had endured when her child spent two years in kindergarten were a "hard expense" ["fue un gasto fuerte"]. In fear that her child would be like other children in her community who repeat the same grade many times, she told her child that if he had to repeat the first grade it would be better for him to stop attending school and look for a job instead of continuing with these expenses:

Feliciana: He was in kindergarten for two years, because he was still young, I didn't want for him to come, but he did want to come. And I came to drop him in school, but it was a hard expense. That is why I tell him to behave well and pass each grade every year, but my mother tells me that it is my thinking, but his [thinking] is not like this. But if his thinking is not like mine what can I do? Children who pass each grade each year are rare, most of them pass a grade after two years, for example one of the children who is already old and he is starting his fourth year in the first grade. I tell him if he does the same it is better not to enroll him again and not spend money for nothing, "you better look for work and seek what to do".

As this example clearly demonstrates parents may hold the belief that formal education will have benefits for their children's future and have the desire to provide them with more educational opportunities; yet, the associated costs with sending their

children to school combined with high levels of grade repetition in these schools can limit the enactment of this desire.

These limitations are even more challenging as children go on to middle school which is not offered in any of the villages. For example, Felipa recognized that even though she and her husband would want to help their son if he decided to go beyond the sixth grade, there was no certainty that they would be able to do this due to the costs of enrollment and transportation:

Felipa: The rest of my children only finished sixth [grade]. Instead, if he wants to continue studying [in middle school], it is possible that we help him to get his degree. We cannot say that it is certain, but at least we will fight for him. It depends on him, on whether he really has the desire of studying, perhaps we can accomplish this. As I tell you, if he really wants it, we will give him more studies. It depends on him when he grows up, if he tells us that he has to continue, we help him.

E2: And how would you help him?

Felipa: We help him, money is needed, that is what they need most. (...)

E1: Money, how?

Felipa: We would have to pay his studies monthly, the transportation tickets will be paid. And, as we are only weavers, we do not earn much and it is not enough. Only for our weekly spending, every week it [our money] is over and, as we buy corn and beans, the money is gone, it is not enough. Oh no! That's where we are stuck because we cannot. That we want, yes we want, but we can't.

In spite of these difficulties and challenges, all of the parents who participated in this study were making the effort to send their children to school and to provide them with what they needed to attend. In speaking about their efforts they often used the words “luchar/” or “la lucha” [fight, struggle or the struggle] and “sacrificio” [sacrifice]⁷ and openly addressed this topic with their children along with messages of the importance of schooling and words of encouragement for them to take advantage of this opportunity. For example, Fermina shared her views of the importance of schooling, alongside her

⁷ In K-iché the verb *ukojik chuq'ab'* stands both for fighting, making sacrifices and/or making an effort for one's wellbeing and to make positive changes in one's life.

own experience and the experience of her own parents of not having attended school, and the “struggle” [*la lucha*] that she and her husband are going through to buy their children the necessary items for them to attend school:

Fermina: I see that it is very important that they are in school so that they can write their name and speak in Spanish. "It is important for you to read, learn, not as I did not study, my parents did not know what to do with a document, now we do struggle with you to buy notebooks, shoes, clothes and all they ask you," I say.

Buying school materials and shoes for the child was an important commitment for this mother and an important break from her own experience as she identified her lack of shoes and notebooks as one of the reasons why she could not finish the first grade:

E2: Did you attend the first grade?

Fermina: Only first grade, but I did not finish it, my parents did not want me to. They bought us goats, cows, pigs, you have to shepherd the goats they told us. I only went to enroll in school, I did not go, they did not give us our place, they did not buy us shoes, they did not buy us notebooks.

These parents' commitment to paying for schooling costs, is not trivial in a context in which schooling continues to place considerable economic burden on families already living under enormous hardship. The investment of financial resources in children's schooling described in this section is consistent with the shift of the flow of financial resources from the older generation to the younger generation as societies move towards an academic-occupational model in which intensive and extensive preparation during the younger years are fundamental for future competition in the labor market (LeVine & White, 1986). Nevertheless, even if parents share academic-occupational values and want to commit to extending their children's formal education by increasing the proportion of the family's resources devoted to schooling, their resources are extremely limited and are often not enough to cover the expenses of sending children to school, particularly once children go beyond primary school.

Investment of time: the many forms of engagement displayed by parents to support their children's schooling. In addition to substantial efforts in their investment of financial resources towards children's schooling, Mayan parents also displayed a commitment to support their children's schooling through the investment of time. Three major categories of time investment emerged from the data: supporting attendance; integrating homework into family routines; and direct engagement in school-supporting activities at home, particularly in literacy-supporting activities.

a) Influencing children to attend school. For some of the parents the mere act of making sure that their children went to school demanded a considerable investment of time. Three mothers narrated the experience of how their children did not want to go to school and they had to spend much of their day walking with them to and from school, and in some cases even staying in school with them. Pascuala shared her child's experience of walking her crying son to kindergarten to make sure he continued attending when he started claiming that he was not able to learn and did not want to go back:

Pascuala: He [the child] said, "I can't with these books, I do not want to go anymore," he said, "You're going *papi*, you have to go," I told him, "all right," he said and he came to school. Although, sometimes he would come crying, but I came with him all the way to the school. It is on us parents to encourage children to read and go to school. If the child says "I do not want to go or I do not want to do it" and the parent says "okay", the child will feel good. What you have to do is motivate them.

In contrast to parents who claimed having little influence on whether their children wanted to attend school, Pascuala felt she had an important role in shaping her child's disposition to attend school, and even insisted that all parents had the responsibility to motivate their children to attend when they did not want to go instead of allowing them to not go. Fermina shared this view. In her case making sure that both of

her daughters attended school took up a considerable portion of her daily life. According to this mother, she and her husband had to force their youngest child to go to school. For two years Fermina accompanied her oldest child and waited around until she was ready to go back home and she did the same when the youngest (i.e., the focal child) was in the kindergarten year:

Fermina: I was in school, but I only finished first grade, my father had no money, we were many children, they could not help us with school, there is no money, they said. With my daughter we make the struggle, we forced her to go, she did not want to come last year, I had to care for her and accompany her to school, I was with her so she could learn. I do not understand [because I did not go to school] so I thought it's better to be with her in school. I did the same with the other who finished sixth grade. Two years I came with her, I waited for her, I waited for her, when she got out I was ready to bring her and I do this with this one: I wait for her, I bring her in the morning, return at noon. What I want is that she learns, whereas I can't, I cannot talk with the *ladinos*. "It was hard for us [when we were young], with you [the child] we are doing what is good for you so you can learn," I say.

Given that Fermina lives at a 40 minute walk from the school, her commitment to walk her child to school in the morning and pick her up at noon imply more than 2 hours of her day. Fermina saw this effort as an important investment to ensure that her daughter learned in school, just as she did with her oldest daughter who was able to finish sixth grade. Underlying her efforts is her view of the benefits of schooling for her children's future to be able to navigate and communicate with the world outside of the community. There is also a strong desire that her child's future will be different from her own experience which she characterizes, as many other parents, as a difficult or hard experience ["nos costó"]. This mother invested her own time to make sure they attended school even if they did not like it.

Similarly, Gladys spent much of her day at school with her daughter during her the kindergarten year and she did this once again two weeks before the interviews:

Gladys: The hardest thing I've had with her was last year when I was looking after her every day for half the day, accompanying her, still one month or fifteen days ago I was like that with her. I was with her because it is for her future so she is not left behind, that is why I have sacrificed myself, my house is abandoned, and there are other needs, the food, the school snack for the other children, and I am there [in school], that's the hardest thing I have dealt with it, but I do it so my daughter can move ahead.

Gladys's account of the "sacrifice" she is making ["me he sacrificado"], clearly conveys her belief that spending time to support her child's formal education is an investment in her child's future. It is also a testament to the associated costs involved in this type of investment of time as the mother is forced to neglect her daily work as a housekeeper. Previous ethnographic studies documented that Mayan parents from previous generations prioritized their children's participation in household work over schooling (Rogoff et al., 2005). In contrast, these three mothers prioritized school attendance over their own involvement in the productive activities they carried out in their homes.

These examples also show that these three mothers saw their role as including the responsibility of guaranteeing their children's attendance to school. Underlying this view is a belief that parents can, and should, have an influence in shaping their children's dispositions and motivation to learn in school. This stands in contrast both to reports from ethnographic work in other Mayan communities conducted in the 1980s and 1990s of the belief that parents cannot affect children's dispositions (Gaskins, 1996), and to accounts from other participants in this study who claimed that they did not have the power to change whether their children liked school. The presence of this variability in this

community is thus indicative of both permanence and change in cultural beliefs about children's development and the role of parents.

b) Incorporating homework into family routines. The investment of family time to support children's schooling was also evident in parents' accounts of family routines. Homework was identified by all of the parents as part of their children's daily routines. In two thirds of the households (20 of 30), the parents reported prioritizing homework by actively structuring the family's daily routine to create the conditions that would guarantee the completion of this activity. These findings provide further evidence of the assignment of time to devote to homework amongst parents from rural areas in Guatemala (Ishihara-Brito, 2013), and extend these findings by providing more specific data on the ways in which the parents' structured their children's time and the rationale behind their decisions.

Eighteen parents reported actively structuring their children's time by making sure that homework took place *before* other activities, most often play but also involvement in household work. A common rationale shared by these parents was that they required their children to do their homework before other activities because it was important that they completed it before they were too tired. For example, Mariela asked her child to do his homework before going out to play because he would feel lazy if he played before:

Mariela: Well, currently he goes to school early, he arrives at 12, 12 is when he gets here. He has lunch and I put him to do his homework before playing, so that he is more relaxed to play, I tell him. But he must get his homework out before, because if I let him play before and then his homework, then laziness grabs him and then he does not do it. So I tell him that he first needs to do his homework and then play, and then he is done with the task at around 3 and a half, and then he starts playing for a while and while he is at that, it gets dark.

Mariela's accounts show that she values play as an important activity in her children's daily routine but one that must come after school work to ensure it gets done.

Similarly, Pascuala asked her child to do his homework before going to work in the fields because later he would only want to sleep:

Pascuala: At dawn, I wake him up and he gets up and says good morning, good day I tell him. Go out to wash your face, I tell him, "Brush yourself" and he does. We then have breakfast, he likes to be working and he goes with the workers. I tell him, "and your homework or school assignments? Wash your hands thoroughly and take out your table in the corridor to do your homework, after your homework you can go with the workers, never do your homework at night because you get tired and you just think about sleeping" I tell him. He knows how long he needs for his homework, if half an hour, an hour or more, he calculates his time and goes to work.

By setting a particular time and place for homework these parents were assigning a privileged place within family life for homework and conveying in this way the importance of formal education to their children. By encouraging their children to complete this activity before anything else, these parents were approaching homework as an important responsibility and teaching them in this way discipline and a work ethic for schooling.

Avoiding tiredness was not the only rationale that parents gave for structuring their children's time around homework. Feliciana reported structuring her children's homework before lunch so she could use lunch as a way to "encourage" him to learn to read:

Feliciana: I check on his notebooks, "go get your notebooks and get to study, if you do not know what it says you ask me" I say. I give him two or three minutes, then I ask questions to him, I will always tell him, "If you can read I give you lunch, if not, I do not give you lunch," I tell him. "If I understand then you feed me" he says, "that is how it is" I tell him, then he gets abreast about it. My mom tells me "I see that you are looking for ways to encourage your son, it was not the case with me and that's why I know nothing".

Feliciana's accounts also reveal the centrality of children's motivation and the parents' encouragement as key ingredients of success in school. Her mothers' observation that this type of encouragement was different than what she experienced as a child is also a testament to generational change.

Cecilia also assigned a central role to motivation in her decisions of how to structure time in her child's daily routine. This mother explained that she allowed her son to play or watch TV before doing his homework because in her view this had an effect on his eagerness ("ganas") to do it:

Cecilia: (...) "What do you want to do now after your lunch?" I tell him "I'm going to play a little" he tells me, "or if not I watch a little TV," "ok watch a little, I'll give you a short time, from there you come for your homework", "ok" he tells me. Yes, because that way he comes to do his homework with eagerness, with eagerness he comes to read or write, because if tell him no, "you don't play" he does it worse, he does his homework reluctantly, it's better that he first goes to have fun, then he does his homework.

In Cecilia's account the child's motivation to learn has a central place in learning. In contrast to the view that there is not much a parent can do to foster her child's disposition towards school work, Cecilia sees that she has a role in helping her son by structuring his time to create the ideal conditions in which he can focus on homework.

A similar rationale was provided by Anabela who preferred that her child rested before doing his homework. This mother also structured her child's time so she could be able to help him:

Anabela: When he arrives at the house he rests a moment, because we live a little removed from the school, so he gets tired from walking and when the sky is clear he arrives tired. What he does when he gets here he rests and then I give him his lunch, he sits down to eat, then we rest with him a while, then I do my sewing, if he has homework then he does it, is that my husband tells him "you do not have any work to do in the evening that is to do your homework from school" he has been given all the time to do his homework in the afternoon. Now when we go out for firewood, what we do is that I tell him to first help me in doing what I'm

doing, for example, if I'm putting firewood somewhere, we help each other and then I help him.

Although the rationales provided by parents around the adequate time for homework were different, these parents were all prioritizing homework by structuring their children's time in the ways that they perceived would guarantee the successful completion of this activity. Unlike reports from studies conducted during the 1980s and 1990s (Gaskins, 1996; Rogoff et al., 2005) that documented work taking priority over school, in the vast majority of parents' accounts school work took priority over household work. The only mother who reported requiring her child to help with some household work before doing his homework was still prioritizing homework as her child's help allowed her to help him with his homework.

In nine households, homework was also a part of the family's daily routine, but the parents did not provide explicit reports of playing an active role in structuring their children's time. In their descriptions of their children's activities, children themselves seemed to be making the decision on when to do their homework. For example, Julia shared:

Julia: (...) when they come back they come content and happy, and start saying "this is what they taught us, this is what we got" they show what they learned. After lunch they begin to do their homework or assignments and so the evening goes, the night arrives and they sleep. Just like that goes one day, other days. That's what children do.

Rosa provided a similar description of her child's afternoon in which homework took place after lunch and before play and help with household work. While Rosa provided evidence of her involvement in homework sometimes in the evening she did not provide any evidence of her active involvement in structuring her child's time:

Rosa: (...) upon returning from school, she eats lunch, does her homework or assignments. After she plays with her brother, she helps me wash some dishes, helps me with cleaning, plays for another moment, when night comes, she has dinner and after dinner sometimes I help her a little with any letter and then she sleeps. That's what she does every day.

Participants' accounts of their active structuring of children's time to prioritize homework or providing their children with the freedom to allot time for homework, stood in contrast with accounts of their own childhood experiences in which children's contribution to household work took priority over school work. In the parents accounts the most common references to household work were feeding animals, fetching wood and water. While in some households feeding animals was still a common chore for young children, fetching water was no longer common as most houses in the four communities had access to piped water. Parents reported that boys and girls were expected to help gather fruit, wash clothes and sweep their homes, and there were different points of views on whether boys should or should not help with cooking.

Just like parents used their own experiences of economic hardship to motivate their children, some parents used their childhood experiences of limited time for homework as a way to communicate the importance of schooling and to encourage their children to take advantage of the opportunities that they were providing for them. For example:

Juanita: Well, [when I was a child] I helped my mother prepare food, or clean. This is what we did because before they did not give us time to "go to study there" or when I arrive in the afternoon "put yourself to study" no, but [they told us to] do other things. As I tell him "papa papa why don't you study? if you do not have work, you do not have to do anything I'm not sending [you to do other things] and you do not have to do anything" I tell him.

By establishing a contrast between her own experience and that of her son and drawing his attention to the fact that she did not ask him to work, Juanita called on him to take advantage of this situation and study.

The priority of homework over other activities, and particularly over household chores, within the family's daily routine was identified by some of the parents who had attended school as an important shift from their own childhood experiences. This is another significant shift in terms of cultural values and learning environments at a historical time in which these communities continue to move towards a more *Gesellschaft* environment (Greenfield, 2009). The parents' prioritization of homework over other activities stands in contrast to what was reported in previous ethnographic studies conducted in Mayan communities during the 1980s and 1990s (Gaskins, 1996; Rogoff, et al., 2005). These results are also consistent with Rogoff and colleagues (2005) findings on the reduction of children's contribution to family work across generations in the Mayan town of San Pedro and Ishihara-Brito's (2013) finding of parental engagement in schooling through the assignment of time for homework. By including the parents' voices, this study extends these findings showing that while some parents purposefully structure their children's time in ways which they perceive will benefit their children's completion of homework others simply allow their children to spend more time doing homework than the time parents were given for this activity when they attended school allowing them to make the decision on when to allocate time for homework autonomously.

c) Direct engagement in home activities that support school-learning: The last category of parental investment of time in supporting children's schooling consists of

their direct engagement in specific school-supporting activities, and particularly in activities intended to support their children in the task of learning to read and write. Parents identified supporting their children's schooling through activities that infused schooling with meaning; helping children develop procedural literacy knowledge and drawing and coloring skills; and helping children in completing their homework. Few parents reported engaging their children in interactions with written materials besides filling *planas* and using the primers that had been asked by the teachers and purchased by the families once children entered the first grade. The different activities through which parents supported their children's schooling will be analyzed in what follows, with particular attention to the ways in which parents' beliefs about children's literacy development influenced their engagement (or lack thereof) in specific activities.

Infusing schooling with meaning: Personal stories and prayer. As evidenced through some of the excerpts from the previous sections, many parents reported engaging their children in conversations in which they openly shared their personal experiences, particularly the struggles they faced due to limited educational opportunities and the efforts that they were making to provide their children with more opportunities. Through these personal stories these parents infused schooling with an emotional meaning as they transmitted the high value that they attached to formal education, encouraged their children to take advantage of the opportunity to attend school, and created a sense of hope for the future. The following account of Jessica's conversations with her child exemplifies the ways in which parents shared their personal stories and the emotional effects that these stories may have both on children and parents:

Jessica: Sometimes I tell her "*mija*, we strive to give you the best, because I do not want you go through what I went through, because I went hungry, I did not

have clothes, I only had a couple of clothes and look I did not even have shoes, how is my mother going to pay for my school?" I tell my daughter, and then sometimes, she sometimes becomes sad "oh no, mommy, I'm sorry that you did not get into school" she tells me "but I'll teach you." I get so excited that my daughter tells me so. (...) "When I grow up I'm going to help you read" says my little girl. So one [I] get excited by that, it gives me so much happiness [even though] I could not [learn], ok? As I tell you right now, right now things are very difficult, the situation in our country, things go up every day, then sometimes we say, then it is a little sad, yes, but what remains is fighting, it is fighting to achieve what we want.

In this account, as in many others some of which have been presented in the previous sections, the parents connected their personal stories of deprivation and lack of educational opportunities with their children's schooling and their hopes for a better future even in the face of difficult circumstances. Personal stories thus serve as a way through which parents' infused schooling with meaning for their children.

Parents in this sample also infused their children's formal schooling with meaning through prayer. Seven participating parents identified praying to God and asking their children to pray with them as an important way in which they helped their children learn to read. For example, Andrés engaged his daughter in prayer so that God could provide her with the strength that she needed to learn to read:

Andrés: Well, you know that everything depends on you, right? especially if we speak of the spiritual [aspects in life], then we always remind her and tell her that for a girl, for us, at the time to kneel or [for] every person, we tell her "do you want to learn that?" "yes," "then you have to ask for great force to God because God, he gives us strength, he teaches us or gives us everything."

Through prayer these parents are connecting their children's academic learning with a central aspect in these family's lives: religion. The use of personal stories and prayer are thus a culturally specific way in which Mayan parents supported their children's schooling by infusing the task of learning with emotional and spiritual meaning.

Preparing children for school: teaching letters, numbers and drawing. Almost two thirds of the parents (19 of 30) reported that either they or a member of their families had invested time in school-like activities to help prepare the child for school. These activities consisted of teaching children letters or letters and numbers (17 families) and drawing and coloring activities (5 families). Both types of activities are well aligned with the activities that children are expected to perform once they are in school. Children's disposition was identified as an important factor in parents' decisions whether to engage or not engage their children in these types of activities. Parents' perceptions of their own skill and time availability were also important factors in parents' decision to engage or not engage in school-type activities, even if they considered these activities to be a part of the parents' responsibilities.

Seventeen parents reported that someone in the family had taught the children letters, or letters and numbers before they went to school. The way in which the parents or other family members taught the children letters and numbers was by giving them “*deberes*” (homework) which consisted of filling *planas*, in which the adult wrote letters or numbers on the top row of a notebook and asked the child to copy them until they filled a page. These “*deberes*” were considered as a fundamental activity to prepare children for school and in many cases as a sign of children's disposition towards schooling. For example, Advertina described how her husband would engage her child in this activity when asked about the right age to “read” to children:

E3: At what age can one start reading to children?

Advertina: I'd say five years. Although [with] my son we started with him at four years, because my husband already read to him. At four years my husband already taught him when he went with him sometimes to the capital city (...) He bought a notebook and gave him like *deber* or homework and he did it, he could fill two notebooks and he had not yet gone to school. He does like to study and write.

E3: And what were those *deberes* like?

Advertina: He started with those that are given to the younger children, the "a", the "e", the "i" that's he taught him, little by little, he continued with the "m", then the "p" and so, little by little he progressed.

As described earlier, *planas* were identified as a common practice in two ethnographic studies in Mayan communities in Guatemala and in Mexico (Azuara & Reyes, 2011; Hamberg, 2011). My own observations in first grade classrooms in the four communities in January and in April (i.e., three months into the school year) also showed that *planas* were one of the main activities in which the children spent their time in school. Furthermore, my examination of children's notebooks in the month of April showed that most of the pages were devoted to *planas* with drawings and pictures that had been cut and pasted from magazines or newspapers of objects that began with the letter that children were learning. More than half of the parents in the study (17 of 30) reported that they or another member of their family had engaged the child in *planas* before they attended school. The fact that families engaged children in *planas* prior to school demonstrated they were interested in preparing children for the activities they would be expected to perform once they started attending school.

Five parents also reported having taught their children to draw and/or color as an important activity that they did to help prepare their children for school. Interestingly, two of the mothers referred to this activity as part of "reading" to children:

Elena: (...) to the small one I am already reading to her, I hand her, a pencil, a piece of paper to learn. I look for a table and chairs and we sit, I give her a pencil and a piece of paper to each one and we practice. To her, we already give her drawings and we also asked her [to make] some drawings and she makes drawings for her brothers them to her brothers. What I want is for her to know, when she goes to school and that way she earns grades.

This mother's consideration of drawing and coloring as "reading" can be interpreted as reflecting the consideration of drawing and coloring skills as important precursors to the skill of tracing letters. For example, Jessica explained that since she taught her daughter how to draw a circle when the child was two, her daughter was able to trace the letter i once she entered school:

Jessica: (...) when she was two she already made her circle and I began to teach her "this is done like this, ok?". I taught her. And when she went to school it did not cost her much [effort], because sometimes the teacher teaches circle, she teaches, for example, the letter i. And now it almost comes out right because since she was young she likes to do that. So I tell her "do you like to do that? it's good." It's good to buy her things, as I said at the outset, I do not have [money] but I strive to give her [what she needs for school].

The view of drawing as an important precursor to tracing letters was also present in many parents' accounts about what they thought when they saw their children drawing or coloring regardless of whether the parent had attended school or not. For example, Francisca, a mother who had not attended school, said that she was happy when she saw her child drawing because she was "exercising her hands to write":

Francisca: I get happy because she is exercising her hand to write, she does her work.

Rosa, a mother with a sixth grade education, used the exact same expression of "exercising" her hands when she shared her thoughts about her child's drawings:

Rosa: it is good because she is exercising her hand. "Continue like this, you have to exercise your hands so they become used to writing and then when you are in other grades, it will be easy for you to write and draw" I tell her.

Drawing was thus perceived by many parents as an important skill for their child's success in learning to write, and it makes sense that some parents reported engaging in this activity as an important activity that they engaged in to prepare their

children for school. From the parents' perspective this was thus seen as sensitive scaffolding to prepare their children for school.

Engagement in *planas* or drawings intended to prepare children for school were partly determined by the parents' perceptions of their child's interest in these types of activities. In families in which a member was engaged in these school-preparedness activities, the parents referred to their children's enjoyment and curiosity as an important reason why they carried out these activities at home. In families where there were older school children, younger children would sometimes ask their parents to create these types of activities for them. For example Cecilia, a mother who taught her first grade child vowels and how to trace his name before he attended school, shared that recently her youngest child had asked her to give him "*deber*":

Cecilia: The other one who is at the house [asked] "mama, when will you give me my *deber*?" He already acts as if he is already in school, carrying his backpack, I put his notebooks inside, as there are notebooks, I bought him one, so he makes his letters there, he can't do it well but more or less he is already trying...

Children's interest in school-like activities served as a motivation for their parents to engage them in these types of activities. In the families in which children demonstrated curiosity and disposition to carry out these activities, they were experienced as an enjoyable activity for parents and children to do together. Given the positive emotions entailed in this activity they may foster children's expectations and positive attitudes towards schooling.

In contrast, five parents reported that they had attempted to engage their children in the same types of activities in previous years, but gave up on their efforts because their children were not interested. For example, Santiago attempted to teach his child the

vowels and numbers by writing them and telling his child to copy, but upon seeing his lack of interest he decided to stop and wait until he would learn in school:

Santiago: When he was not studying yet I told him I was going to teach him, I bought his notebooks, but he did not do it because he does not take it, [he does not] like this, then I said “It’s better that he goes to school and he learns there” because I was teaching him and he did not do it, I have no other way to do it, right? So there [at school] he seems to be learning.

E1: And how were you trying to teach him?

Santiago: I taught him his words, his numbers. The letters a, e, i, o, u. The numbers too, beginning from 1 to 10. Aha. Yes. Then I start to write it for him to do it, but like, he [does it for a while] and then he drops it there and goes to play, so, what can be done? That is why I said I “it’s better that he goes to school and there he will do his work”. When it is with the teacher then he does learn, because he says “dad, they gave me this”, “Well then, do it *papa*” because it is his work and he starts doing it well and the teacher gives him points.

Just as in his accounts on his expectations of how far his child would go in school, this father conveyed the sense that there was not much he could do to change his child’s disposition; yet, he still trusted that his son would become interested once he was in school and the teacher gave him points for his work. In four of the five cases the parents considered that their children had become interested in these activities once they started attending school. The exception was Romelia, the mother who reported that her child did not like learning and who was considering the possibility of having her child work in the fields with his father.

Although many parents reported engaging in preparatory school activities, others explained that they did not engage in school-like activities before children attended school because of their perceived lack of ability or lack of time. Five of the 12 parents who had not attended school expressed having the desire to engage their children in these types of school-like activities but being unable to do so due to their lack of literacy skills. For example:

E3: at what age do you think it would be appropriate to read to children?

Micaela: when they are six.

E3: and why at that age?

Micaela: only in that way they can understand, with writing teaching them by holding their hands. And when they get to first grade they already have an idea of how you must write.

E3: did you read to your child before he came to school?

Micaela: no, because I do not know how to read and write.

Lucía, one of the mothers with 6 years of education considered that she had the responsibility and the skills to give her daughter “*deberes*” but did not have the time:

Lucía: (...) her uncles would tell me “give her *deberes*” they told me “and what you have to do is write her all of the vowels, and give her only two pages every day and as she enters school it will be easier for her” they told me. That is what we should have given to her but we didn’t (...) if, as a mother or father, we had the time to teach them before school, they would not struggle when they come to school, when one [a person] did not go to school they do not know much, but since we do not have much time. Until they come to school is when they learn.

In sum, the majority of the participants, including parents who had not attended school, considered that families should engage children in school-like activities before they began attending school. Engagement in these activities was influenced by parents’ perceptions of their children’s disposition, their own skills and time availability. The activities in which children were engaged in before attending school (i.e., *planas* and drawing activities) were largely focused on supporting children to develop the skill to trace clear letters. As will be shown in the following section few children were engaged in interactions with texts that were not focused on helping them develop tracing skills before they started attending school, and interestingly in some cases these interactions became even less frequent after the child started learning how to identify and trace letters.

Interactions with written materials: Using Bibles, hymn books, newspapers and magazines at home. While over half of the parents (17 of 30) reported that someone in their family had spent time teaching letters and/or numbers before the child began

attending school, only a third of the parents (10 of 30) reported that they or other family members spent time interacting with the child around written materials that were not related to school. In most households, children's interactions with print were limited to activities intended to develop the code-based skills of recognizing and/or tracing letters such as *planas* or copying from the primers that had been purchased for school. Moreover, some of the parents displayed a preference for these types of activities which would help their children develop procedural literacy skills, over other types of interactions with texts which could potentially foster conceptual knowledge of literacy, such as reading newspapers, the Bible or other religious materials together, or engaging in pretend reading of hymns or newspapers.

A third of the parents (10 of 30) reported that either they or another family member had spent some time interacting with the child around reading materials that were not related to school before the child entered school. These materials included the Bible, hymn books or other religious materials that were handed to them at church (five families); old textbooks, newspapers, magazines or catalogues (six families); and storybooks that the child had borrowed from the *Leer Juntos, Aprender Juntos* Book Bank (two families). Three of the families reported interacting with more than one type of material.

Many of the parents' descriptions of these interactions evidenced that they were initiated by the child rather than by the parent. For example, Isabela narrated how her child would ask her to read the newspaper to him:

Isabela: (...) And when there are there newspapers, or my nephew takes the newspapers, because he buys it. "Lend it to me" he tells him and he starts. When he sees that there is something important and he cannot read "mommy, mommy what does it say here?" he asks me and gives it to me fast. So I tell him "here it

says this, *papi*". "What happened here?", "It says here that this happened" and I read what is important, right? "Ah, so that". And if my dad is here, it's more with my dad, "look dad, what it says here, my mom says" [he tells him] and because the two of them do not know how to read, my father or my mother, "my mom says that this says this" he tells them. "Oh boy, where did that happen?" The two pay attention to him, they pay lots of attention. It is not like those who say "oh, yes" looking elsewhere, not. They only pay attention to what you say.

As evidenced by this quote, the adults in this family valued the child's spontaneous interactions with written materials and believed that he was able to understand what was read to him even if he did not know how to read. Out of the ten parents who reported these types of spontaneous interactions with written materials before school, six considered that children would be able to understand a storybook that was read to them before they started attending school. However, four parents complied with their children's requests to read to them before school but believed that the children were too young to understand what was read to them until they entered school. Furthermore, once their children began learning how to recognize and trace letters, three of these parents limited their children's interactions with written materials to the use of primers as part of their homework. The case of Lucía serves to explain the rationale behind this decision. Lucía reported having read newspapers and old books to her daughter when her daughter started bringing these materials and asking her to read them; however, she believed that her daughter was not able to understand what she read to her until the year when she began attending school. In line with this belief, Lucía saw these interactions more like pastimes for an active child, rather than as valuable literacy activities:

E3: How old was your child when you started looking at books with her?

Lucía: Since she was very young, because she would not stay still and walked anywhere in the house, and she would find some old book or the newspaper and I

looked at it with her, but she did not understand what I told her, until that time maybe a year ago she started to understand some of what is said to her.

Once her daughter began learning how to recognize and trace letters in school, Lucía limited her interactions with books to the school book (i.e., the primer), guided by the belief that if her child saw another book she would not be able to understand it:

E1: And in the house does she have other books that are not from school?

Lucía: There are other books but they are not hers but belong to her uncles (...) she does not have any other books, only the one she is using in school. At first she struggled a bit, but she is learning. She reads it, she looks at it, I cannot show her another book because she will not be able to read it, because there will have some letters that they have not taught her yet, but if she uses her book then she will know how it goes and where it goes.

This mothers' appreciation that other books would "have some letters that they have not taught her yet" is explained by the structure of the primers that are asked by first grade teachers which follow a linear and highly structured approach moving from isolated letters, to syllables, words and sentences, and finally extended texts. First, children learn how to trace vowels. Each vowel is presented in a separate page with a drawing that represents the sound (e.g., a mouse screeching to represent the letter *i*) and other drawings of objects that begin with the vowel (e.g., *iglesia* [church], *insecto* [insect], *iguana*). Children practice tracing vowels in *planas* in their notebook until the teacher considers that they can move on to consonants. Consonants are also presented one at a time beginning with higher frequency consonants in Spanish such as *s*, *l* and *m*, and ending with the least frequent such as *x*, *k* and *w*. Each consonant is assigned two pages. The first page presents the consonant with a drawings of the object that represents the sound (e.g., a cow mooing for *m*) and objects that have the letter in it (e.g, *mesa* [table], *mamila* [baby bottle]). This page also lists all of the possible syllables that can be formed with the consonant (e.g., *mi*, *mu*, *mo*, *me*, *ma*, and *im*, *um*, *om*, *em*, *am*) and some

disconnected words (e.g., mes [month], mamá [mom], mamila [baby bottle], amo [love]). The second page presents sentences (e.g., “amo a mi mamá” [I love my mum], “mi mamá es Lola” [Lola is my mother]). The words and the sentences in the primer only use the consonants that have been presented up to that point, which explains Lucía’s remark that the primer will not expose her child to any letter that she has not been taught yet.

The primers provided few opportunities to interact with complete texts in a meaningful way. The sentences presented in the pages devoted to a consonant were not necessarily connected to each other. Moreover, even when the sentences were connected to each other thematically, there were few texts with a meaningful structure. One of the primers (which was used by the teachers in three communities) included a one-page story in the last page, another primer (used by one of the teachers in the Road village) included three stories in the last pages. Evaluation exercises consisted of filling in gaps or copying sentences and there were no opportunities to strengthen children’s reading comprehension. Thus, the primers focused on strengthening children’s procedural knowledge of literacy (i.e., knowing how), and provided few opportunities to strengthen children’s conceptual knowledge of literacy (i.e., knowing why) or their comprehension skills.

The available data does not allow an assessment of the extent to which the reported parent-child interactions with non-school reading materials provided children with the opportunity to develop oral language skills like vocabulary or understanding of narrative structures. Nevertheless, given that these reading materials had a particular use at their home it is plausible that these interactions allowed children to develop some emergent conceptual understanding of literacy, for example, their understanding that you

read print and not the pictures in a newspaper or a catalogue, or that newspapers contain different information than the Bible or other religious materials that are handed out at church. This type of conceptual understanding of literacy has been shown to facilitate children's acquisition of the mechanics of reading and writing, as children with higher conceptual knowledge at school entry have been shown to have a faster rate of growth in their procedural literacy knowledge than children with poorer conceptual knowledge (Purcell-Gates, 1996). In this way, the types of interactions with written materials as a response to children's spontaneous interest in print described by Lucía and other parents, could potentially serve as a basis for children's later acquisition of literacy.

The case of Romelia provides another example of the ways in which children's spontaneous interactions with text were limited by the parents' understanding of literacy development. Romelia witnessed her child's spontaneous interest in written materials from an early age. Similarly to Lucía, this mother also believed that these spontaneous interactions were not as important as the activities that were sent home from school. In speaking about her child's pretend reading of hymn books, Romelia emphasized that her son was just pretending and wished that he would learn how to do his homework:

Romelia: He takes the book of songs and sings acting as if he could read and he can't. The lyrics of the songs, he has them in his memory. It is good to sing, but, he should also learn to do his homework and school assignments.

Similarly, this child's grandparents discouraged him from engaging in pretend reading of newspapers. Romelia agreed with them and took this opportunity to advise her child to focus on in paying attention to his teacher so he could learn:

Romelia: sometimes he looks at Nuestro Diario [the newspaper], he looks at the pictures, although he wants to read but he cannot read yet, he just looks at what they are doing and he begins to make up stuff, that they killed a man, that they killed a child, that a baby is sick, and he tells my father and mother in law and

they tell him “what do you know, child? go, go over there, what do you know?”, they tell him. He begins to get angry and he says, “ok, I do not know anything”, he says and he throws the paper to the ground.

E3: What do you think about that?

Romelia: What I tell him is “put your batteries on [a metaphor for becoming motivated and investing energy into something], because now they see that you cannot do it yet, they don’t listen to you, if you were able to do it then they would believe what you read, it’s better that you listen to what your teacher says and learn, only in that way you will be able to read about the events that appear in the newspaper and your grandparents will believe you”, I tell him.

Literacy experts since the 1980s have established the importance of children’s own attempts at reading and writing as a way of discovering and learning about literacy (Clay, 1996; Ferriero, 1986). In particular, pretend reading of the type displayed by Romelia’s child is an important component of children’s emergent conceptual knowledge about literacy and of children’s literacy-relevant oral language development (Sénéchal et al., 2001). Through these behaviors, Romelia’s child demonstrated his understanding the functions of different printed artifacts (hymn books and newspapers) and his perception of himself as a reader. However, Romelia and her in-laws did not perceive these as meaningful interactions and preferred that the child spent time engaged in homework activities. By challenging her child to learn to read so his grandparents believe him, Romelia was encouraging him to learn to read. It is also worth noting that her descriptions of her child’s interest in hymn books and newspapers contrasts with her perception that her child is uninterested in learning to read.

Four parents, who supported their children in developing procedural or code based literacy skills before they entered school, actually refrained from engaging them in more meaning-based interactions with written materials. Their decision was consistent with their belief that before school children could learn how to trace letters, but they would not be able to understand a story until they went to school. For example, Cecilia, a

mother who had taught her child how to trace his name before going to school, claimed that the right time to read to children was when they were in the first grade because it would be “a waste of time” to read to a child who does not know and is not able to understand:

E1: At what age, from what age would it be appropriate to read to children?

Cecilia: Well, from when they start the first grade.

E1: And did you read with your child before he entered the first grade?

Cecilia: No, because it would be a waste of time reading to him if he does not know. Instead right now more or less a little. Like now “papa hear what he says”, I say. I first read what these readings say and then asked “what does it say?”, he tells me “this, and this, and this” and more or less he already understands what one tells him [I tell him].

E1: Well, so at what age did you start reading to him?

Cecilia: Until now I'm starting with him, now that he started his first [grade].

The preference for activities that foster code-based skills over other types of interactions with texts was not limited to parents who did not believe that children could understand a story that was read to them before school. Juanita's child had borrowed some books from the *Leer Juntos, Aprender Juntos* Book Bank during his kindergarten year and Juanita read these books to him twice or three times a week even before participating in the parent workshops. However, and in line with the importance she assigned to code-based skills, once her child started learning how to recognize and trace letters, she stopped reading and began using the books to teach him to recognize and sound out (“pronunciar” [pronounce]) letters:

Juanita: I teach what it says here with the books that they bring from school, with the seño [Leer Juntos, Aprender Juntos staff] and so we see it, “what does it say here?” [I ask him] sometimes he can't, because since he does not know what letter it is, so “this is the letter” [I tell him]. “And what it is this?” I tell him the pronunciation, and that's what he is learning. Because as I tell you, if we do not teach, if we let it and not teach them, his mentality will go for something else, but we demand, or if, if we do not study it, we do not prepare him, then he is falling behind.

She also reported spending more time dictating words to her son using a blackboard that she bought for this purpose:

E1: And so before that he knew the letters, did you do something different with books than what you do now that he knows the letters?

Juanita: Yes

E1: What are you doing differently?

Juanita: What's different is that sometimes, like now what we do is ... right now what I do is dictate, do dictations, I have a small board there, and then I do dictations. "Write down that word 'fine' " and he does. And yes, when I look I see he already knows, he can now, it is hard and he is thinking, but he does it. Not like other children. Like the teacher said that ..he was...he says that when they begin to study or I [referring to the teacher] ask him, what does it say here? They begin to cry, he [teacher] says, but he [my son] does not cry, just, "do this" [teacher asks him] "it's ok" he is thinking, but he does it, yes.

In sum, parents displayed a preference for school-like activities which supported their children's procedural knowledge of literacy or code-based skills over meaning-based interactions with texts that would center on the content of the text or on expanding the child's vocabulary or language, more generally. In fact, in the majority of households the children's only interaction with written language consisted of either *planas* that were given to them as preparation for school or homework activities using the primers that parents had purchased once the child started the first grade. Only a third of the parents reported that they or another member of their family had interacted with the children around texts for non-school purposes. Interestingly, most of these interactions with written materials that were not related to school were reported to be initiated by the child rather than by the adult, and many of the parents showed a preference for school-sanctioned ways of interacting with texts, thus oftentimes neglecting the oral language aspect of literacy even in the few cases in which that aspect had been part of their literacy practices before the child started school. In this way, for these few families, schooling

seems to be disrupting spontaneous literacy practices conducive to literacy-relevant oral language development.

Supporting homework. As previously described, homework activities resembled the activities in which first grade children spend most of their time in school (i.e. completing *planas* in their notebooks or copying from primers with occasional drawing and coloring activities).

Parents' direct engagement in homework was reported as a common activity in every household. While not all of the participants reported being engaged in school-preparedness activities or in interactions with texts that were not related to school, once their children entered school all of them reported being directly involved in their children's homework in one way or another. These results are consistent with Ishihara-Brito's (2013) finding of wide-spread parental involvement in children's homework in Guatemalan rural communities. Parents took four different approaches to providing homework support: (1) testing their children's knowledge of letters and/or checking the quality of their children's homework (and asking for support in cases in which they were not able to help directly); (2) making themselves available to answer their children's questions or provide whatever help they could; (3) learning together; and (4) encouraging children's completion of homework tasks. These four approaches are described in what follows.

"The little I know, I teach my child": Actively checking homework and enlisting others' help. Roughly half of the parents (17 of 30) reported being actively involved in testing their children's knowledge and/or checking the quality of their children's homework. Seven parents asked to see their children's notebooks and asked questions

intended to test their knowledge of the letter names and “pronunciation” (i.e. their sounds). Santiago provided a typical description of the types of interactions reported by these parents:

Santiago: "Go bring your book and study for a while" and the first thing I do is tell him the name of this letter and [I tell him] "say it like this and like this". Of course I'll ask again "what do you call this?", "it is it's called this" or better "how do you pronounce this letter?" and he tells me. Ok and "how do you say this?", "that one?", and that's it. That is how I spend [time] with him, aha, yes, I help him, because what I want him is to not be afraid of starting another day, as I/he? sometimes ask me "what is this called, dad? the thing is it does not stick to me" Ok, it is ok, we call this, this."

This group of parents who reported testing knowledge and/or checking the homework's quality, included Micaela, a mother who had not attended school but whose husband had recently enrolled in an adult literacy program and was learning to read. Micaela identified checking her child's homework as the main activity that they did when they were together and something that both she and her husband enjoyed doing:

E3: When are you and your child in the same place?

Micaela: At 4 pm, looking at his homework with him because the next day he was going to go to school, to present his homework. And when he comes back again, I sit with him to look at his homework.

E3: What do you normally do when you are together?

Micaela: We like to look at him writing, we teach them how to do it if we know. "What did they tell you this [letter] is called? We ask him, sometime he tells us and sometimes he doesn't, and when we know the letter we tell him.

Four parents helped their child by checking that he/she had traced the letters adequately and asking him/her to erase it and repeat it if it was not done correctly. Importantly, this group also included two mothers who had not attended school. Even though Jessica could not understand all of the letters that her daughter was tracing, she relied on judging whether the traces looked crooked or too close together and asked her to repeat it:

Jessica: (...) if it is bad although I do not know what it says there, but if I see the letters that are all crooked, all stuck [laughs] then I tell her, no, separate it a little I tell her. Even one day the father scolded her because he explained to her but she mostly did not do it, and stuck them close together, the letters in her homework, my God, and when I realized, now what do we do? And because it is with pencil, then you can erase it, "do it again," I told her.

Feliciano took on a much more active role helping her son by holding his hands and showing him how to trace them if he had not traced them correctly:

Feliciano: (...) because he studies and sometimes he can't with his letters, I start to check with him, I check with him, sometimes I do not have time, but I put away five or four minutes to review it with him, then I tell him if it is good "you did well", "you must keep going," I tell him. Now, if it's not right I teach him, aha, (...) There are letters that he can do and others that he cannot do, so I come and take his hand with the pencil and show him how to do it and he learns, that is how you have to help a child, you have to teach him.

Eight parents reported checking the quality of their children's homework and asking for help from other members of their family who they believed were better equipped to assist their children when they considered that their children needed help. Seven mothers who did not attend school reported relying on family members and less frequently to other members of the community for support: Fermina asked for the help of her older child, Carla asked for help from her husband, Gabriela from her brother, Julia from her sisters, Fabiana from her nephews, Dominga from her niece, and Pascuala from her child's classmates. Dominga provided a typical description of how these mothers supervised their children's homework and tapped into the support of others when their children needed help:

Dominga: I tell her to do her homework well; I am on top of her homework. She shows me what she did. "Is this well done?" she tells me, "it is well done" I tell her. "This is not well done, go and show her" I tell her, to my sister's daughter to ask her if it is well done. "They are the ones who will tell you" I tell her. If it is not well done, she scolds the girl, "you have to do it well", she tells her, "if you do not do it well the teacher will scold you". When the girl does not do it well, she teaches her how to improve.

Andrés, a father with a third grade education, was the only father who had attended school who reported asking for support from others. This father asked his wife to provide assistance in one aspect in which he did not feel entirely comfortable. Andrés felt he was able to help his daughter by sharing his knowledge on letter identification, yet he considered that his wife who was a teacher was better equipped to teach his daughter how to hold a pen:

Andrés: (...) at least the little I know I teach her, I explain what letter it is, or whether it is uppercase or lowercase, the little I know, but it is more my wife, every time she comes, because she is a teacher she explains better, like that. My wife explains her [how to do it] more, so she already grabs a pencil, so now it is like she no longer has difficulty holding a pencil or crayon, because as she knows more, and as I had mentioned before that I had just few, well little education, then I do not know much how it is exactly to grab a pen or, right? then I better tell her, "what I know I teach her and what you know you teach her", we always help each other with her.

In sum, a significant portion of the participants considered that testing their children's knowledge and checking the quality of their homework was an important part of their role as parents. Some of the mothers who had not attended school drew from the resources they had to help their children; for example, checking if the letters looked crooked even if they could not identify them or relying on the teachers' marks to check their children's progress. In cases in which the parents perceived that they were not able to help, they tapped into other sources of support. Mothers who had not attended school reported this behavior more frequently than parents who had attended school. In fact, the majority of mothers who had not attended school (10 of 12) expressed wanting to provide their children with more help but feeling unable to do so due to their limited literacy skills. The behaviors of checking children's notebooks, particularly the quality of children's traces on their notebooks, and asking for support from other members of the

family, had been previously reported by Ishihara-Brito (2013) across seven communities in rural Guatemala. This study extends these findings by documenting the specific strategies used by unschooled mothers.

“When she really can’t, then she calls me”: Being available when the child requests help. While some parents actively supervised their children’s homework others reported making themselves available to provide help when it was needed. For example, Lucía’s daughter was able to trace her letters but asked for her mother’s help when she did not know the name of a letter. Lucía provided the name and insisted that her daughter “pronounce” the name of the letter as she traced them:

E3: Tell us about what these *deberes* are like?

Lucía: It depends on what they give to her. Sometimes she can complete them on her own and sometimes she can't, and I must come to help her. I say "go do your homework" "ok" tells me. There she has a table and there she does her homework. When she really can't, then she calls me and tells me "Mom come look at this with me" and I approach her and help with what I can.

E3: Can you give me an example of what she cannot do when that's why she asks for your help?

Lucía: It is letters that they give her in the notebook. She asks for help when she cannot say the name of the letter, because sometimes she only writes it but cannot remember how to read it or what is the name of the letter, but I tell her that "when you are writing you have to pronounce the name of the letter so you learn, it is not only to write it" I tell her. So, when she no longer remembers a letter when she gets to the house, that's when she calls me and I tell her the name of the letter.

Four mothers who had not attended school reported helping their children with their drawings. For example, Julia checked her child’s homework and asked for her sisters’ help when she considered that her child needed help; however, she still helped her daughter with her drawings by telling her which colors to use:

Julia: Sometimes she asks about her drawings if it is OK, and I say it's okay, she asks me if she can make another one, I say it's okay, that she should do it, that way she feels happy. (...) when she was in kindergarten, they gave her books and she colored them, she draws them. And we are always aware of it when she colors

and help her, we tell what color to use to draw something. Depending on what she draws she comes to us and we choose the colors of crayons to draw.

Thus, even some of the mothers who considered that other family members had better skills to help their children with their *planas* or other text-based interactions such as sounding out letters or learning letter names, considered that they had sufficient skills to help them with their drawings.

“I am learning something with you”: Learning the letters together. Two mothers, Gladys and Jessica, viewed their involvement in their children’s homework as an opportunity to expand their own skills at recognizing letters. Gladys was the mother who saw her second grade education interrupted after her father died and had to work in a sugar cane plantation. Jessica was the mother who never enrolled in school and left her home when she was 12 to work as a maid in Guatemala City. These two mothers relied on an alphabet that was provided by their child’s teacher to learn with their children. Gladys’s husband taped the alphabet letters on the wall of the room where the family sleeps and asked Gladys to repeat the alphabet with their child every night:

Gladys: The teacher wrote on a cardboard the alphabet and gave them to us. Then, my husband placed the cardboard on the wall where we sleep. And he tells me, "if you can not be with her in the afternoon then you can be with her at night, because I will not be able to", he tells me. What I did with my daughter is teach her *a, b, c*. We were reviewing it several times, I taught her, I taught her, then I asked her to tell me and like that, she was learning.

Gladys identified this as her favorite activity to do with her child because she considered that she was learning something with her:

E3: What do you enjoy doing with your daughter?

Gladys: I always feel good with my daughter, because like I tell her “there are times when I am learning something with you”, I tell her, I feel good because I learn with her, there are times like I am telling you I am practicing the twenty eight letters, *a, b, c*, that is what we are practicing. I tell her “I did not know the letters when you had not entered the first grade, but now we are at six, I have

them in [my] memory” I tell her “I am already around ten” she responds, she moved ahead already. Together we start to study, so that is what makes me feel good, for example, yesterday there was a meeting, I said “daughter we did not study” and she says “that is ok mom, tomorrow we will study” she says. I feel good with my little girl when I study with her.

Jessica also reported carrying out this activity with her child, teaching her the letters that she knows and repeating with her daughter the specific letters that she has not learned yet many times:

Jessica: With the dad we have put the alphabet there in the bed, so she repeats it to her dad but I make the attempt with her also and the ones I know I tell her "look that this and that", "well mother, but when I am big I will help you to read" says my little girl (...) I start with her, look at this or that way, right? for example, she did not know about 3 or 4 letters, right? come we repeat them several times, because this is what the teacher has said, right? "you repeat it several times in the house" and we began to repeat and it is staying with her, it is staying, it is staying.

These mothers’ engagement with their children was an opportunity to reinforce their own procedural knowledge of literacy, as well as to bond with their daughters.

“Little by little you will learn”: Encouraging learning without providing direct help. Twenty parents who were actively involved in helping their children through supervision or making themselves available to answer questions, also reported providing encouragement and maintaining their children’s motivation in the task as an important way in which they supported their children’s homework, particularly when their children expressed not wanting to do their homework. Take for example Isabela’s account of how she encouraged her child to do his homework when he became upset by telling him that he had to be a good example for his classmates:

Isabela: sometimes he gets angry, “ay, I do not feel like doing it”, “but do it” I tell him, “ah, ok” he tells me like he is getting angry but he does it (...) when he says “I do not want to do it”, “no, you have to do it because it is good” I tell him, “if you do not do it and all of the others –the thing is his name, his last name is with b so when they call by list to review the homework he is the first one to come up–

so if you do not do it the other children will not do it either” I tell him, “ah, ok” and he does it.

In this example, Isabela is promoting her child’s engagement in homework as well as supporting him to display a desirable behavior for his other classmates, displaying in this way the belief that she can influence her child’s disposition and that he will also have some influence on his peers.

There were two unique cases in which the mothers reported encouraging their children but abstaining from supervising their children’s homework or providing them with other types of help (e.g., drawing and coloring). Francisca and Rosario considered that they did not have the abilities to help their children with their homework. In line with this, they expressed that their role was to observe and encourage their children but not intervene. Francisca stated that because she did not know how to read and write she saw her role as encouraging her child to study more and give her words of encouragement:

Francisca: What I do is only tell her, is like what I was telling you, that I do not know how to read or write, that is why what I do is tell her to study more, in the afternoons I always tell her to read so that she learns more (...) [I tell her] words of encouragement, for example, little by little you will learn, that is what I always tell her.

Similarly, Rosario explained that when her child is studying, she prefers to not tell her anything:

Rosario: I only look at them [her children as they are engaged in school-like activities]. For example with her when she studies I cannot tell her something, because if I do what if what I tell her is not right, then I can interrupt what she is doing. That is why it is better for her to do what she has to do. Plus she is doing and achieving her work alone, what could I tell her?

From this mother’s perspective, given that her child was not facing any difficulties and achieving on her own, it was better for her not to intervene, just in case she was wrong. Interestingly, this mother had learned how to read working in sales in the

town. Yet, she continued to think of herself as someone who only knew “some letters”. While mothers who did not know how to read, like Micaela, Julia, and Jessica, became directly engaged in providing homework support, Rosario considered that she was not able to provide this support. These two mothers (Francisca and Rosario) saw their role mainly in terms of encouragement rather than supervising or providing assistance.

These parents’ views of encouragement as part of their role in their children’s homework resonate with some of the efforts presented previously which were aimed at improving their children’s motivation to attend school or to take advantage of their schooling, such as sharing personal stories or accompanying children to school. Parents who engage in these practices arguably hold the belief that they will be able to influence their children’s disposition and motivation.

The type of active participation in children’s homework can be seen as further evidence of cultural change. Parents who had attended school identified their engagement in homework activities as an important generational discontinuity. Amongst the 18 parents who attended school only two reported that their own parents had helped them with homework in the ways in which they were helping their children. Anabela, a mother who finished the third grade, narrated how her father used to help her by sitting with her and encouraging her to complete her homework. Santiago, a father who finished the sixth grade, shared that his father helped him by explaining the meaning of words.

Seven parents who had attended school identified that a fundamental break from their childhood experience was their ability to help their children with their homework activities, something that their parents were not able to do for them. Advertina’s account

is a typical of the answers provided by these seven parents to the question on how they compared their childhood experience to that of their children:

E3: Was your experience when you were a child similar to or different from your child's?

Advertina: Nooo, it's different. Before my parents could not read or write. Now we teach them, we help them, that's very good. But my parents did not do that, because they had no studies, my father died without studies. Only when he went traveling in the capital he learned to read a little. Instead, my mother never learned because she never had studies. And how they can teach if they did not have studies? The good thing is that now we already know a little about some things and we can teach our children and help them learn better.

E3: What activities did you with your parents as a child?

Advertina: Nothing, and no one told me what I had to do with my *deberes* and homework, I was the one who did what I had to do, not that they teach you, that this is done and the other like this, that this book says this, nothing like that. It was just me with my little knowledge and the little that I learned at school.

Some of the parents with low literacy skills diminished the importance of the support they provided when asked directly what they did to support their child in becoming a good reader. Four of the parents who had not attended school provided lively descriptions of how they were involved in their children's homework either during their accounts of daily activities or when speaking about their experience of sharing the storybook with their child; however, they diminished the importance of their actions when asked directly what they did to support their child in becoming a good reader. For example, Pascuala was actively involved in her children's homework by structuring her children's time around homework, setting up a space in which her child could do his homework every day and encouraging him to complete his homework when he did not feel like it. She also reported that in the past when her oldest child had faced difficulties she had asked for help from her child's classmates. However, when she was asked what she did to help her child in becoming a good reader she began the sentence by saying that

there is “nothing” [no hay] and that she “just” tells him and asks him if he did his homework adding that this was because she did not know how to read:

Pascuala: There is nothing. I just tell him and ask him if he did his homework and qualified this by adding that this was because she did not know how to read.

Similarly to Lucía who felt regrets for not having given her child “deberes” before attending school, Pascuala’s answer conveys the idea that she should be doing something more to support her child’s learning to what she already is.

In sum, adult-child interactions around homework were reported as a widespread practice by the participants of this study and identified by some participants as a fundamental change in the learning environments experienced by Mayan children in this generation. All of the parents reported being involved in their children’s homework in one way or another whether it was supervising it; answering their questions and helping them in whichever way they could; finding others to support them when they could not help them; learning with them; or providing encouragement. However, some parents who had not attended school reported preferring not to provide direct help due to their lack of skills and/or diminished their role when asked directly about how they supported their children’s learning at home.

Parental Beliefs and Commitments about Formal Education across Groups of Parents with Different Schooling Levels (RQ3)

Contrary to what was expected, there were few identifiable patterns of differences in parental beliefs about the benefits of formal education for their children’s future across the three groups of parental schooling. Parents from across the three schooling levels identified the benefits of formal education to establish connections, navigate and survive in the world outside of the village and to get a job to “defend themselves” and “get far in

life” (see Table 9). Both schooled and unschooled parents framed these benefits in terms of avoiding feelings of fear, pain, regret and shame that they experienced due to their limited educational opportunities. Similarly, both groups of parents, those with and without schooling, expressed the view that their children would make the decision of how far to go in their education. These results stand in contrast to previous studies that found that parents with more years of schooling were more likely to aspire for their children to have occupations that required more formal education than parents with fewer years of schooling (LeVine et al., 2003, 2012). While it is unlikely that the parents had a close relation to people who had accessed a salaried job through educational attainment, it is plausible that the benefits of formal education have become evident to parents through other mechanisms of contact with the world outside of their communities (e.g., contact with school teachers, professionals who travel into the community, travel, contact with media, and communication with community members who migrated to cities).

While more parents who had attended school identified the benefits of schooling to participate in community councils (i.e. COCODES) and church within their village, only one mother who had not attended school explicitly identified participation in COCODES as a potential benefit of formal education for her child’s future. This can be related to the parents’ expectation that their children will move out from their community when they are adults. At the same time, given that this benefit is more tightly connected to the community’s rather than the individuals’ wellbeing, this result may also signal the increased weakening of values of reciprocity towards members of the local community that may take place as communities move towards more *Gesellschaft* conditions (LeVine & White, 1986). Notably, some of the participants from across the three levels of

schooling identified the weakening of values of reciprocity as a potential drawback of higher levels of educational attainment (See Table 9).

Table 9
Identified benefits of formal education by parental schooling levels

Benefit of formal education ^a	Parental schooling level (years)		
	0	1 – 3	6 – 12
Navigating and establishing connections with the world outside of their communities	9 (75%)	8 (80%)	6 (75%)
Accessing a salaried job	5 (41.6%)	8 (80%)	4 (50%)
Participating in community councils and church	1 (8.3%)	5 (50%)	5(62.5%)

^a These benefits are not mutually exclusive. Nine families identified more than one benefit.

Notably, and against expectations, there were no patterns in parents' beliefs on whether they could influence their children's disposition towards schooling across the three levels of schooling. While some parents who had attended school displayed the traditional belief that there was not much they could to influence their children and granted their children the autonomy to decide whether they would attend school or not, some parents who had not attended school actively disagreed with this belief and considered that an important part of their role as parents was influencing their child's disposition towards school and limiting their autonomy in making decisions about their schooling. These results also point to the influence of other parents' experiences in shaping their beliefs about their role in their children's schooling beyond their own participation in Western school.

The specific types of activities in which parents were engaged in to support their children's schooling varied by their own schooling level (see Table 10). The majority of parents who had six years of education or more (6 of 8 or 75%) reported being actively engaged in organizing their children's time to ensure that they completed their

homework. In contrast, just over half of the parents with 1 to 3 years of schooling (6 of 10 or 60%) and parents who had not attended school (7 of 12 or 58.3%) reported this behavior. It is however important to note that unschooled parents did not differ from parents with one to three of education and that the accounts of unschooled parents who structured their children's time were qualitatively indistinguishable to those provided by parents who had attended school.

Table 10
Parental activities to support their children's schooling by parental schooling level^a

Parental activities	Parental schooling level (years)		
	0	1 – 3	6 – 12
Structuring children's time for homework	7 (58.3%)	6 (60%)	6 (75%)
Infusing schooling with meaning: personal stories	10 (83.3%)	8 (80%)	4 (50%)
Infusing schooling with meaning: prayer	4 (33.3%)	2 (20%)	1 (12.5%)
Encouraging children to complete their homework	12 (100%)	4 (40%)	6 (75%)
Teaching letter and numbers before the child started attending school		2 (20%)	7 (87.5%)
Interactions with written materials before the child started attending school	2 (16.6%)	2 (20%)	6 (75%)
Testing / checking for quality of homework activities	10 (83%)	4 (40%)	3 (37.5%)
Answering questions/ providing homework help	5 (41.7%)	4 (40%)	4 (50%)

^a These activities are not mutually exclusive.

Parents with less schooling were more likely to report spending time in activities intended to motivate their children to attend school, complete their homework, and in general to take advantage of the educational opportunities that they had. Reports of the use of personal stories and prayer as a way to motivate their child to attend school and take advantage of the educational opportunities that they had were more common amongst parents who had not attended school and amongst parents who had one to three

years of schooling, than amongst parents who had six to twelve years of schooling.

Unschoolled parents were also more likely than schooled parents to report that an important part of their role as parents was providing encouragement and maintaining their children's motivation to complete homework. While parents from all schooling levels invested time in activities intended to influence their children's disposition towards schooling, these were more common amongst parents with fewer years of schooling or who had not attended school.

Parents from the different schooling levels also differed in their reports of their engagement in academically-oriented activities at home. As can be seen in Table 10, parents with more years of schooling were more likely to be engaged in text-based activities than parents with fewer years of schooling, such as teaching children letters and numbers and interacting with written materials before the child started attending school. Notably, the two only children who had attended afternoon reading camps were the sons of two mothers from mothers with six or more years of education. Nevertheless, it is important to note, that some children of the parents with fewer years of schooling were involved in text-based activities at home. Five of the twelve unschooled parents (41.6%) reported that someone else from their family had taught the child letters, or letter and numbers before they started attending, and two parents with no schooling reported having interacted with their children with non-school related materials before they attended school. Feliciano reported having helped her child memorize passages from the Bible that she had memorized herself so he could recite them at church. Jessica reported that her husband read stories from the Bible and other illustrated children's books that they had obtained in Guatemala City to her and her children since her child was two years old.

When her husband was not around Jessica and her children would sometimes look at these illustrated children's books and magazines.

Once children entered school all parents reported being engaged in their children's homework in one way or another. Parents with more schooling were more likely to report being directly involved in providing help. In turn, parents who had not attended school were more likely to report checking for quality and asking for help from others to provide direct assistance. Again, it is important to note, that even though the parents who had not attended school were more likely to express not being able to help with text-based activities than parents who had attended school, some of them were still engaged in these activities. Mothers who were not able to read reported checking the quality of their children's homework by capitalizing on the resources they had, for example looking to see if the letters looked crooked or relying on the teachers' marks to check on their children's progress. Amongst the five mothers who had not attended school and who reported providing direct assistance with homework, three of them were actually referring to drawings, but one of them reported helping her child trace letters by holding his hand and one mother reported practicing the names of the letters with her daughter.

In sum, parents from the three schooling levels expressed similar beliefs regarding the benefits of formal education for their children's future. Interestingly, and against expectations, there were no patterns in parents' beliefs of whether they could influence their children's disposition towards schooling across the three levels of schooling. Parents from the three schooling levels reported their commitment to invest financial resources and time to support their children's schooling. Nevertheless, the specific types of

activities in which parents invested their time varied across the three groups of schooling. Parents with less schooling were more likely to report investing their time in activities intended to increase their children's disposition towards schooling than parents with more schooling. In contrast, parents with more schooling were more likely to report being engaged in text-based activities and structuring the child's homework time than parents with less schooling. It is however important to note that there were exceptions to these general patterns. Some schooled parents also reported investing time in activities intended to infuse schooling with meaning, such as sharing personal stories and prayer. Conversely, a few parents who had not attended school drew from their available resources to become directly involved in text-based activities.

Discussion and Implications

This study characterized Mayan parents' beliefs about the benefits of formal education and their commitments to support their children's schooling in four communities undergoing significant sociodemographic change as they move from subsistence- to cash-based economies and are increasingly connected with the outside world through commerce, travel and access to new technologies. The results of this study provide additional support to of Human Development and Social Change Theory. By exploring the beliefs and commitments of both schooled and unschooled parents this study highlights the role of parental experiences beyond their participation in Western schooling as important sources of social change.

According to Human Development and Cultural Change Theory as communities move from relatively self-contained systems based on subsistence economies, towards systems that are better connected and more reliant on cash-based economies, there will be

changes at the levels of cultural values, learning environments and human development trajectories (Greenfield, 2009). Previous studies, including observational studies in Mayan communities conducted during the 2000s, identified maternal schooling as an important influence of historical change on mothers' beliefs about formal schooling and on mother-child interactions (Chavajay, 2006; Chavajay & Rogoff, 2002; Levine et al., 2003; 2012). Yet, the influence of paternal schooling on Mayan parent's beliefs about formal education and on their involvement in supporting their children's school-relevant learning has not been widely studied. A recent study, focused on parents' perceptions of formal education in rural Guatemala (Ishihara-Brito, 2013), identified a mixture of instrumental views of formal education as the way towards economic mobility and traditional beliefs (assigning importance to moral guidance, a belief in children's innate abilities, and respect for their autonomy in deciding whether to attend school or not). It also evidenced parents' commitments in investing time on their children's homework, which stand in contrast with previous ethnographic accounts in Mayan communities.

The present study contributes to this knowledge base by exploring the potential influence of paternal schooling through a characterization and comparison of schooled and unschooled Mayan parents' beliefs about the benefits of formal education for their children's future and the commitments they make to support their children's schooling. The results of this study provide further evidence of cultural change and continuity in these communities, and signal the importance of other parental experiences beyond their participation in school in shaping their beliefs and commitments. Given its specific focus on parental practices to support children in learning to read, this study has specific implications to improve Mayan children's literacy development. In what follows I

identify the main contributions of this study and discuss their implications for research and practice.

Evidence of Cultural Change and Continuity Regarding Mayan Parents' Beliefs on the Benefits and Drawbacks of Formal Education

The co-existence of instrumental views of formal education as a way to move forward in the academic-prestige hierarchy alongside more traditional values of respect and reciprocity evidenced in this study is consistent with the prediction of the presence of academic-occupational and traditional values at times of rapid social change (Greenfield, 2009). Nevertheless, and contrary to expected, there were no evident differences in the identified benefits of formal education between schooled and unschooled parents, calling attention to other parental experiences in shaping these beliefs. These results call for an expansion of the lens used in previous studies examining parents' perspectives on the benefits of formal education at time of social change. In terms of practice they signal an important challenge for policies and practices seeking to respond to Mayan parents' expectations for formal education.

The instrumental view of formal education as a means for economic mobility is expected as communities become more integrated to academic-occupational systems in which intensive and extended formal education is required to compete in the labor market (LeVine & White, 1986). In line with this most studies examining parental beliefs about formal education in communities moving towards *Gesellschaft* conditions have used surveys that are narrowly focused on parents' aspirations for their children's attainment of higher degrees of education and/or attainment of *professional* jobs requiring university-level education (e.g., LeVine et al., 2003, 2012). This instrumental view of

formal education as a means for economic mobility was certainly present in this sample as more than half of the participants, from the three educational levels, expressed the aspiration that their children would continue their education in order to obtain a better job. These results thus provide further evidence in support of the main tenets of Human Development and Social Change Theory (Greenfield, 2009).

These results also call for an expansion of the lens used to examine shifts on parents' views of the benefits of formal education at times of social change. The need for basic literacy skills and command for Spanish has become increasingly necessary as Mayan communities become better connected and integrated to Guatemala's mainstream society through travel, commerce and trade, and through other forms of communication such as television, newspapers, books, cell phones and computers (Rogoff et al., 2005). Ishihara-Brito (2013) found that parents identified the ability to write one's name and communicate in Spanish as important benefits of formal education. The present study confirms the finding that the ability to connect, navigate and survive in the mainstream society is a potential benefit of formal education for children whose home language does not correspond to the language of schooling as their communities become better connected to the outside world. It extends previous findings by highlighting the importance assigned both by schooled and unschooled parents to gaining enough confidence and security to carry out activities in the outside world such as interacting with health care providers or government officials. This belief should thus be taken into account in future research and interventions seeking to elucidate and respond to parents' perspectives on the education that they desire for their children.

Parents in this study also expressed that formal education provided the benefit and opportunity to make better contributions in governance and religious institutions within the community. Interestingly, these reports indicate that literacy plays an increasingly important role even inside the life of the community. Participants referred to this benefit when discussing their own schooling; however, this benefit was not salient when these same parents referred to the benefits of formal education for their children's futures. Thus, even though some parents saw that education helped them become more involved in their communities, they did not refer to this same benefit in discussing their children's future. This may be an indication of some of the parents' expectation that their children would move out of their communities once they became "professionals" or gained a salaried job in the urban center. It can also be an indication of the greater salience of other benefits of formal education for children's future which are more tightly connected to the individual's rather than the community's wellbeing (i.e., the ability to navigate the world outside of the community or the possibility to access a better paying job).

Levine and White (1986) warned against the potential drawbacks of the introduction of a morality system that ties people's value to their individual educational attainment and occupation, and the concomitant weakening of other sources of personal value such as intergenerational reciprocity and filial loyalty. Some of the participating parents in this study signaled this potential drawback of formal education, as they perceived that people who attain higher levels of education often become arrogant and forget their responsibilities to their families and other members of their communities. In doing so, these parents evidenced the persistence of traditional values of respect and

reciprocity that had been identified in ethnographic fieldwork conducted during the 1980s and 1990s in Mayan communities (Gaskings, 1996, 1999; Rogoff, 2003).

The present study's finding of continuity of traditional cultural values of respect and reciprocity resonates with findings of other studies on parental values at times of rapid social change. For example Keller (2007) found that the child-reading practices of middle-class parents from societies moving from more *Gemeinschaft* to more *Gesellschaft* conditions were influenced by values of interdependence of their own parents, as well as by their own adaptations to their present urban middle-class lifestyle in which values of individual autonomy were increasingly prevalent. Fong (2007) found that Confucian values of obedience, excellence, independence and caring/sociableness persisted alongside Chinese parents' desires for their children to be self-assertive and competitive to gain better positions as their community moved closer to a capitalist system.

Initiatives that seek to respond to Mayan parents' expectations for formal education face the challenge of finding approaches that foster children's skills to connect and function within the mainstream society, while also promoting traditional Mayan values of solidarity and respect for others, as this continues to be a priority for some parents in these communities. Analysts have long called for the direct involvement of indigenous communities, representatives, and intellectuals in discussions about the purpose and nature of the education their children receive (Lopez, 2009). The results of this study signal the need to address in these discussions not only the promises, but also the potential drawbacks of formal education and ways to mitigate them. Part of the solution in preventing discrimination against uneducated members of their own

communities that some of the parents feared, may lie in the expansion of multicultural education to reach non-indigenous sectors of society with the aim of promoting ideals of mutual respect, understanding and re-valuing of the knowledge and practices from indigenous communities (Lopez, 2009).

Evidence of Cultural Continuity and Change Regarding Mayan Parents' Views on Children's Disposition towards School

Cultural continuity and change was also evidenced in parent' views of their children's disposition towards school. Almost a third of the participants from across the three levels of schooling reported that their child would be the one to decide how far to go in his or her formal education. For these parents, children's disposition towards school was more important in whether their children would continue attending school than the perceived utility of further studies. The participants' perceptions of their lack of influence on their children's disposition towards school resonate with Gaskin's (1996) finding of the wide-spread belief in Mayan communities during the 1980s and 1990s that children's intelligence, talents, and dispositions were influenced by innate forces that were outside of the child's or the parents' ability to change and control. The autonomy provided by some of the parents for their children to decide whether they continued in school is also consistent with previous findings of deep respect for children's autonomy from a very young age amongst Mayan communities (Chavajay, 2006; Gaskins, 1996; Rogoff, 2003). A more recent study (Ishihara-Brito, 2013) reported similar findings of cultural continuity with traditional beliefs regarding children's development and respect for autonomy. Children's success or failure in school were attributed to innate abilities such as

intelligence or “weakness” and parents granted their children the power to decide whether to attend school or not, and whether they would continue to secondary school.

The present study brings nuance to these previous findings of cultural continuity in Mayan communities by documenting variability in parents’ beliefs with some displaying this type of traditional views and others evidencing transformations in these views. The group of parents that distanced themselves from traditional beliefs expressly stated that parents can and should shape their children’s disposition towards school. This shift in parental beliefs was not related to the parents’ own experiences with the institution of Western school. Parents who had attended school were as likely to express traditional beliefs as parents who had not attended school. Furthermore, unschooled parents reported making substantial investments of time in activities intended to influence their children’s disposition towards schooling by motivating them to attend school, complete their homework, and in general, take advantage of the educational opportunities that they had. Taken together, these findings thus provide additional evidence of cultural continuity and change in parental views, and provided evidence that suggest that other factors beyond parental schooling may influence Mayan parents’ beliefs regarding the malleability of children’s dispositions.

Notably, while parents differed in the extent to which they displayed continuity or change from traditional views, in both types of perspectives children’s disposition towards school was identified as a central factor for school persistence and success. The implication for practice is that interventions intended to increase Mayan children’s completion of primary school may benefit from focusing on children’s motivation. Efforts to increase access to primary education in Guatemala have been largely focused

on the economic barriers to formal education faced by families living in poverty. As previously stated, the present study found that these barriers are considerable for Mayan families that rely on agriculture and craftsmanship. These barriers should be addressed by initiatives and programs. At the same time, there is substantial evidence that other factors beyond family poverty are at play in children's completion of primary school in Guatemala. A study which used data from a nationally representative survey conducted in 2000, the Encuesta Nacional sobre Condiciones de Vida, found that scholarships intended to support families in covering the costs of sending children to school had an impact on enrollment but not on completion of primary school (Adams, 2007). Another study using data from primary school students in 55 rural schools in three different regions of Guatemala found that beyond family variables, school-level variables explained significant variation in dropout rates (Marshall, 2011). In addition to higher enrollment fees, lower school climate (measured by a school's average rate of fighting), larger class sizes, and not having an indigenous teacher predicted higher odds of dropout. Arguably all of these variables are connected to children's enjoyment and motivation to attend school. In line with the importance assigned to children's disposition and motivation for school success by parents in this study, there is a need to complement existing policies that seek to address economic barriers, with innovative interventions that make schools more responsive to the students' needs and foster children's motivation and enjoyment of school.

**Lack of Educational Opportunity as a Source of Strength and Motivation for
Generational Change: Beliefs and Commitments amongst Parents with Limited
Educational Opportunities**

Previous studies have identified parental participation in the institution of Western schooling as an important influence in social change (Chavajay, 2006; LeVine et al, 2003; 2012, Rogoff & Chavajay, 2002; Rogoff et al., 1993). Previous studies in Mexico and Nepal (LeVine et al., 2003, 2012) found that mothers who had spent more years in school were more likely to expect that their children would obtain jobs that required academic credential than parents who had spent fewer years in school. The results of the present study showed that unschooled parents were as likely to view of formal education as a means to a better-paying job and as enabling children to navigate and survive the outside world as parents who had attended school. Many parents framed their aspirations for their children's future in relation to their own feelings of personal deficit, and saw their children's educational attainment as a way to avoid the feelings that they had experienced within a system in which personal value has become increasingly tied to the position within the academic-occupational hierarchy (Levine & White, 1986).

Rather than acting as an impediment towards higher aspirations, the parents' own lack of educational opportunities served as a source of strength and motivation to live up to their desire that their children would have a different experience than their own, even in the face of difficult circumstances. These parents' persistence in the face of adversity and their hope for a better future resonate with the concept of "aspirational capital" coined by Yosso (2005) as part of her framework of Community Cultural Wealth which acts as alternative to dominant interpretations of Bourdieuean cultural capital. According to Yosso (2005) dominant interpretations of Bourdieu have narrowly focused on White middle class values and practices as the only form of cultural knowledge that is valuable, deeming all other forms and expressions of cultural knowledge as lacking. In her

framework she calls for a broader view of cultural *wealth*, which goes beyond traditional definitions of cultural capital to include all types of accumulated assets and resources within a community –even if these are not recognized by dominant groups as valuable. Aspirational capital, or “the ability to maintain hopes and dreams for the future despite real and perceived barriers” (p. 79), is one of the ways in which she argues Communities of Color have been able to survive and resist macro and micro forms of oppression.

Parents in this study used personal stories of their lack of educational opportunities and their ongoing struggles to infuse schooling with meaning. Through their personal stories these parents transmitted the high value that they attached to formal education, encouraged their children to take advantage of the opportunity that they were providing them, and created a sense of hope for the future. Similarly to what has been found amongst Latino populations in the United States, the personal stories shared by Mayan parents can be seen as representing ‘the creation of a history that would break the links between parents’ current occupational status and their children’s future academic attainment’ (Gándara, 1995, p. 55).

Some of the parents also used prayer as a way to support their children’s schooling. These parents accounts of asking their children to entrust themselves to God to ask for strength from God resonate with Pérez Huber’s (2009) definition of “spiritual capital” as “a set of resources and skills rooted in a spiritual connection to a reality greater than oneself” (p.721). Just as aspirational capital, spiritual capital also provides children with a sense of hope, faith and strength, which are used to negotiate and navigate daily experiences (Pérez Huber, 2009).

The accounts of unschooled parents signal the role of other experiences outside of school as shaping parental beliefs about formal education and the commitments that they make to support their children's schooling. The use of personal stories and prayer are a culturally specific way in which unschooled Mayan parents supported their children's schooling and could be built upon by family-based interventions working in these communities.

Financial Commitments to Children's Schooling as Further Evidence of Social Change and as a Persistent Barrier to Schooling in Mayan Communities

Cultural change was also evidenced through parents' reports of the investment of financial resources as one of their main commitments to support their first-grade children's formal education. An increase in the flow of resources from the older to the younger generation is expected as communities move toward more *Gesellschaft* conditions (Greenfield, 2009; LeVine & White, 1986). Participating parents referred to the efforts and sacrifices they were making to be able to pay for the costs of schooling. Even though Guatemala established a system of free primary schooling since 2008, school is certainly not free. According to the lowest estimates provided by the participants in the study, the costs of sending a child to the first grade comprise more than three quarters of the monthly earnings of a weaver, which is one of the most common occupations amongst the parents in this study. In line with this, the mere act of paying for the costs associated sending a child to school represents a significant financial commitment on the part of parents to formal education and a signal of social change by demonstrating a shift in the flow of resources towards the younger generation.

Parents' reports of the reduction of children's participation in household work also indicate a shift in the flow of resources towards the younger generation. Rogoff and colleagues' (2005) reported diminished time in family work amongst children across generations. The present study evidenced that parents play an active role in the reduction of time in household work by encouraging their children to spend more time doing homework than the time that their own parents gave to complete schoolwork when they were children. This data thus provide evidence of inter-generational cultural change and challenges persistent representations of Mayan parents as drawing their children away from school to engage in household work.

In spite of their desires, many parents worried that their available resources would not be enough to cover the expenses associated with sending a child to school, particularly if their child wanted to go beyond past primary school. Thus, there is still a need for policies and programs such as conditional cash transfers and scholarships that support families to cover the costs of their children's primary school education with investments in quality of education to respond to the increased demand (ICEFI, 2011). In addition, given parents' concerns about the possibility to send children to continue their education outside of their communities, investments to expand the system of free schooling to secondary education in rural communities are necessary.

School and Parents' Preference for Code-based Activities: The need to Foster Meaningful Interactions with Texts at Home and School

The syllabic method (*método silábico*) and the use of *planas* has been a powerful framework to teaching reading and writing in Latin America since the nineteenth century. The emphasis of this teaching method on the mechanical aspects involved in decoding

and encoding written language deny children of other opportunities to interact with written language in more meaningful ways. Children discover and learn about literacy both through their interactions with more learned others (Rogoff, 1990) and through their own attempts at reading and writing (Clay, 1996; Ferriero, 1986). Through their interactions with written materials that have an authentic communicative purpose at home, Mayan children could potentially develop their emergent *conceptual knowledge about literacy* (i.e., why we read). For example, children could develop their understanding of print conventions (e.g., you read print and not the pictures in a newspaper), their understanding of the functions of different printed artifacts (e.g., newspapers, the Bible, hymn books), and their perception of themselves as readers (Sénéchal et al., 2001). These skills have been shown to facilitate children's acquisition of literacy, as children who had greater conceptual knowledge of literacy at school entry showed a more rapid development of procedural skills than children with poor conceptual knowledge (Purcell-Gates, 1996). In addition, by engaging in conversations around texts with their parents children can potentially develop oral language skills relevant to literacy such as vocabulary and narrative skills (e.g., Bus, van Ijzendoorn, & Pelgrini, 1995; Dickinson & McCabe, 2001; Leseman & de Jong, 1998; Scarborough & Dobrich, 1994; Sénéchal et al., 1998).

Homework activities constituted the main contact that the majority of children in this sample had with written language at home. Few parents reported interacting with their children around written language in ways beyond developing the code-based skills to identify and trace letters before they started school. This was consistent with a widespread belief that children would be able to carry out exercises in tracing letters and

number before school, but that they would only be able to understand texts that were read to them once they were in school. In the few cases in which the parents interacted with their children around written materials before school, many of these interactions seemed to be initiated by children rather than by their parents. In some of the families in which the parents and the children had looked at newspapers or old books together, once the child entered school, interactions with texts that may have an authentic communicative purpose such as spontaneous interactions with news papers or religious materials conducive to children's conceptual understanding of literacy (i.e., why we read) and to literacy-relevant oral language development were displaced by homework activities.

Ishihara-Brito (2013) had documented the importance of homework as one of the main activities through which parents in rural Guatemala support their children's homework. Parents' descriptions of homework activities in the present study resembled the types of repetitive exercises on isolated features of written language that were documented by previous ethnographic studies in other Mayan communities (Azuara & Reyes, 2011; Hamberg, 2011) and by my own observations in the four participating communities. By and large the parents' approach to these activities also resembled the approach amongst first-generation immigrants from rural communities in Mexico and Central America to the United States in which the parents emphasized the importance of adequate pronunciation and constant repetition as central components of the process of learning to read (Reese & Gallimore, 2000). A considerable portion of the families reported having incorporated school-sanctioned ways of interacting with written language into their routine. The majority of the children had the opportunity to develop necessary skills to identify and trace letters, but had few opportunities to experiment using written

language for authentic communicative purposes. In commenting about exercises in which children practice isolated features of written language, Azuara (2009) rightly points that children experience “something that resembles reading and writing, but it is not literacy” (p. 167).

The paradox of parents’ preference for code-based skills even in spite of their ability to engage in other types of interactions has been noted in previous studies with first generation immigrants to the United States who had been raised in rural communities in México and Central America (Goldernberg & Gallimore, 1995; Goldenberg et al., 1992; Reese & Gallimore, 2000; Reese et al., 1995). While the parents in this sample integrated reading and writing activities for real purposes in their children’s lives such as when reading the Bible or teaching a moral story, when they perceived that the goal was helping children learn to read they preferred interactions that emphasized decoding at the expense of meaning making. This study, thus, provides further evidence to show that parents’ understanding of the process of learning to read may shape their interactions around texts in the ways in which they believe will better support their children in this task.

Given that the parents’ preference for activities that emphasize the mastery of basic code-based skills is well aligned with the activities that their children are bringing home from school, these activities could be an important lever of change in Mayan children’s learning. Homework was identified as a central activity in children’s daily routines and, without exception, the parents reported being engaged in this activity in one way or another. Parents who had not attended school were more likely to report feeling less capable of providing direct help in homework. However, some of them drew from

the resources that they had available to help their children. Even in cases in which the parents expressed that they could hurt their children if they provided help due to their lack of relevant skills, they made sure to look for others to help them and encouraged them to complete their homework. These results suggest that parents assign great importance to the activities sent from school, and they will make significant efforts to sustain this learning environment for their children in their daily routines. To leverage parents' commitment to supporting activities that help children succeed on school assignments, homework activities could be recreated to include opportunities for children to develop more conceptual/meaning-based rather than procedural/code-based literacy skills.

These shifts in the nature of homework will necessarily require a new approach to literacy instruction at school. There is a need for professional development that provides teachers with a deeper understanding of literacy development beyond the acquisition of procedural literacy skills and that equips them with the ability to create learning activities in which written language is used for authentic communicative purposes. In line with the critical pedagogy aim of supporting students to read the *word* and the *world* (Freire, 1970), Azuara (2009) has advocated for the integration of children's stories, oral and written, into the curriculum valuing them as texts and using them as gateways into learning. Children should be encouraged to produce their own writing rather than merely copying other people's writing and teachers could work with them to co-create books and materials which mirror the children's language and cultural background (Azuara, 2009). This initiative has been taking place since 2013 at the Padamu Residential Education Centre with indigenous children of the Hill Tracts, in Bangladesh. Children collect folk

tales from their parents, grandparents and other members from their villages and share them in the classroom. Teachers then work on transcribing and editing these stories. Five of these stories have already been published into children's books that are then used in the classroom. At the same time, schools should also help the students to expand their repertoire of literacy practices by allowing them to explore different genres and negotiate the meaning of text (Azura, 2009). This will require investment in high quality reading materials and teacher training and professional development to create learning activities that foster higher-level literacy skills, as well as pertinent content knowledge.

A concomitant implication from the results of this study is the need to support parents in expanding their understanding of literacy development so they can build off and enrich the practices that they are already carrying out at home. The majority of the participants in this study considered that part of their role as parents was engaging children in *planas* and coloring activities intended to prepare children for school. In contrast, fewer parents reported having engaged their children in interactions with written materials that were not intended to develop their procedural literacy knowledge. Nevertheless, even if they interacted with texts at home some parents did not consider these interactions as part of what they could do to prepare children for school. A narrow definition of literacy in which "reading is about decoding, and writing about tracing clear letters" (Azura & Reyes, 2001, p. 187) prevented parents in this study from recognizing the ways in which activities with written materials that were not narrowly focused on code-based skills could potentially support their children's literacy development. Programs working with families should share knowledge on the importance of conceptual literacy and oral language skills for literacy acquisition and encourage parents to

celebrate and promote their children's spontaneous efforts to explore written materials, even if the child has not mastered the skill of tracing letters.

Furthermore, these programs could work with families in fostering oral language skills that have been shown to facilitate literacy acquisition such as children's listening comprehension skills and their abilities to retell stories. Previous studies have shown that the use of elaborative strategies such as asking children to provide more information and evaluations (i.e., mental states and judgments) in conversations about the past can promote children's narrative skills, concepts about print and story comprehension both in middle class and low-income populations (e.g., Leyva & Smith, 2016; McCabe & Peterson, 1991; Reese, 1995; Reese et al., 2010). Parents who are not able to read may benefit from knowing that interactions that are not necessarily focused on either reading the text or on promoting children's procedural literacy skills (letter identification, word reading) can also support their children's literacy development.

In sum, the results of this study provide further evidence in support of Human Development and Social Change Theory and signal the importance of other parental experiences beyond their participation in school in shaping parents' beliefs about formal education and the commitments that they make to support their children's schooling. In terms of practice this study calls for the strengthening of policies such as scholarships and conditional cash-transfer programs that address the costs of sending children to school, alongside innovative interventions that build on parents' commitments and that expand their understanding of literacy development, and policies that improve children's motivation and learning experiences at school. It is, however, important to note that while these interventions can make an important difference in Mayan children's academic

achievement and retention in primary school, they will not be sufficient to improve their life chances. Without societal investments to increase access to higher levels of education for children from rural villages, these parents' hopes for a better future for their children may remain unfulfilled.

Limitations and Future Directions

This study constitutes one of the few contemporary approximations to Mayan parents' beliefs and commitments around their children's formal education. The limitations of this study provide avenues for future studies in Mayan communities.

The first limitation of this study lies in its lack of exploration of the views of parents of young children who are not attending school. While participants in this study expressed different views regarding the value of formal education for their children's future and some of the parents' expressed the possibility that their children would drop out of school at an early age, all parents in the sample were making an effort to send the first-grade child to school. Future studies seeking to explore Mayan parents' beliefs about formal education should aim at incorporating the voices of parents of young children who are not enrolled in school to provide a more complete account of the beliefs about the benefits and drawbacks of formal education in these communities.

Parents' self-selection is another limitation. Parents who decided to participate in this study are likely the parents with more time to participate and more confidence in their abilities to support their children's schooling. A lack of time was the main reason provided by 4 of the 6 eligible parents who did not accept the invitation to participate. As one of these mothers explained, even an hour spent in the study meant lost resources for her and her child. In addition, one of the 6 mothers who chose not to participate shared

that she did not feel entirely sure on whether she was raising her child adequately and was more interested in gaining our advice than in merely sharing her experience, and was afraid to be judged by us. Future studies may thus consider providing financial compensations for parents' time, as well as designs that allow engagement in a true exchange of knowledge between participants and researchers, such as action research.

Finally, this study is limited in its reliance on parents' self-reports about the practices that they carry out at home. As evidenced in the analysis, some of the non-schooled mothers who provided lively descriptions of the ways in which they were involved in their children's learning at home diminished their role when asked directly about what they were doing to help their children become better readers. It is possible that the parents' consideration that they should be doing "more" led them to undermine these efforts and potentially avoid mentioning other practices that they were carrying out at home but did not deem worth mentioning during the interview. It is equally plausible that the parents could have felt the need to provide answers that they deemed socially desirable. Thus, there may be a mismatch between the parents' reports of the practices that they are carrying out at home and their actual practices. More importantly, parents' reports are limited in providing an accurate account of the quality of the interactions. For instance, parents' reports of "talking" to their children give us little information on the quality of such conversations. An important future avenue for research consists in conducting an ethnographic study with extended periods of participant observation in different households. Another interesting alternative entails using semi-naturalistic elicitation tasks to study interactions hypothesized to support children's school-relevant learning at home. In the second article of this dissertation I use this approach by

examining how Mayan parents enact a book-sharing interaction. Future studies should also examine the types of culturally relevant interactions reported by the parents such as conversations about the past or interactions with newspapers and religious materials, in order to elucidate more specific ways in which interventions may strengthen these interactions to support children's language and literacy development at home and in other community spaces in ways that are culturally congruent and that enrich and build from culturally relevant family practices.

Despite limitations, this work makes an important contribution to a growing field of studies devoted to understanding the connections between sociodemographic change and shifts in cultural values, learning environments, and developmental pathways (Greenfield, 2009). As predicted by Social Change and Human Development Theory (Greenfield, 2009), this study found that changes in sociodemographic characteristics were associated with shifts at the level of cultural values and learning environments with signals of both change and continuity in four Mayan communities that have experienced significant sociodemographic changes in the previous decades. This study also suggested that differences in the beliefs of the benefits of formal education between schooled and unschooled parents may be less marked than those reported in previous studies (e.g., Levine et al., 2003, 2012). Finally, this study's grounded theory approach allowed me to identify beliefs and commitments that appear to be specific to K'iché-speaking Mayan parents in rural communities in the Quiché department. These more specific findings highlighted the importance assigned by parents to children's disposition towards schooling and the central role assigned to homework as a way to support children's school-relevant learning at home. Future studies should examine conversations about the

past and spontaneous interactions with written materials that are already taking place in some of these Mayan homes as potential culturally-relevant interactions that could be strengthened in family interventions.

III. Study II. Book-sharing styles amongst Mayan parents and their first grade children

Socio-cultural theories of human development posit that children develop as they participate in social interactions within culturally defined arrangements of life and work (Rogoff, 2003). From this perspective, children's literacy development is a process of participation in meaning-making practices that are shaped by the discourse patterns of the communities and learning contexts in which children participate (Heath, 1983; Heath, Street & Mills, 2008; Hull & Moje, 2012). While children from middle-class communities often experience continuity in the communicational styles of home and school, children from minority communities may face disruptions in the discourse patterns of these two contexts (Duranti & Ochs, 1986; Heath, 1982, 1983; Rogoff, 2003; Tharp, 1994). A common approach to improve children's literacy development has been to attempt to teach parents how to read storybooks with their children in ways that resemble the prevalent discourse patterns of schools (Anderson, Anderson, Lynch & Shapiro, 2003; Auerbach, 1995; Carrington & Luke, 2003). These interventions have been successful with middle-class families, but have shown limited success with families with low educational levels (Mol, Bus, de Jong & Smeets, 2008; Reese, Leyva, Sparks & Gronlick, 2010).

In this context, literacy scholars have long advocated for a wider knowledge base regarding literacy practices of non-middle class communities. Such knowledge would allow a better alignment between home and school practices, as well as the creation of programs that supplement, rather than supplant or disrupt, families' cultural practices (Delgado-Gaitan, 2001; Heath, 1983; Janes & Kermani, 2001; McNaughton, 2001). This

study intends to contribute to this knowledge base by characterizing the book-sharing styles among rural Mayan K'iché-speaking parents with the ultimate goal of informing the design of future efforts to support K'iché children's literacy development at home and school. Specifically, I aimed to examine differences in book-sharing styles between schooled and unschooled parents on the basis of the degree to which parents engaged their children as interlocutors in the interaction and of the type of content they emphasized. In what follows I provide an overview of the research context and relevant studies on parent-child interactions in Mayan communities and on book-sharing styles focusing on these two main categories. I then present the design of this study. In the results section I first offer a characterization in terms of parents' interactional style and content of talk and then examine trends between the different styles and parental schooling levels.

Overview of the Research Context: K'iché children in Guatemala's Quiché region

Guatemala can be characterized as a country with rich cultural and linguistic diversity and high social, economic and educational marginalization for indigenous groups. Almost half of the population in Guatemala (40%) self-identifies as indigenous and as a speaker of at least one of 22 Mayan languages (Instituto Nacional de Estadística Guatemala – INE, 2011). Speakers of the K'iché language are the largest indigenous Mayan group in Guatemala corresponding to 11% of the population (INE, 2011). They are also one of the groups facing the biggest challenges in economic and educational opportunities. In 2011, 55% of the non-indigenous population in the Quiché department lived in poverty, of which 16% were identified to live in extreme poverty conditions. These figures were considerably higher amongst the indigenous population: 84% lived in

poverty, and 27% in extreme poverty (Programa de las Naciones Unidas para el Desarrollo, 2011).

A similar level of inequality characterizes educational opportunities. In the year 2000 40.2% of children between the ages of 3 and 18 in the Quiché department were not enrolled in the educational system. This figure reached 70.6% for children living in the rural areas of the department in which the majority of the population identifies as indigenous (Instituto Centroamericano de Estudios Fiscales, 2011). Speakers of indigenous languages in Guatemala face the additional challenge of not being able to access schooling in their home language. Even though the National Program on Bilingual and Intercultural Education (PRONEBI) is in place since 1996, the Central American Institute for Fiscal Studies (Instituto Centroamericano de Estudios Fiscales, 2011), estimated that in 2011 up to 150,000 students whose home language was K'iché were being served by monolingual schools. Even in cases in which children are enrolled in a bilingual school, most likely they are not receiving literacy instruction in the indigenous language as only 40% of the teachers who applied for the government-provided bilingual bonus in 2008 reported that they considered themselves fully proficient in reading and writing in the indigenous language they were supposed to teach (Müller, 2009).

In this context, indigenous and non-indigenous children have shown a test score gap in measurements of literacy of between .8 to 1.06 standard deviations (Hernandez-Zavala, Patrinos, Sakellariou & Shapiro, 2006; McEwan & Trowbridge, 2007). In response, in recent years the Guatemalan government and NGOs have made investments to support children's early literacy development by involving their parents in book reading at home, with specific initiatives directed to indigenous regions. Between 2012

and 2013 the national campaign run by the Ministry of Education *Leamos Juntos* broadcasted over 26,000 spots on the radio inviting parents to read at home with the children (Ministerio de Educación, 2014). Save the Children's *Leer Juntos, Aprender Juntos* intervention implemented in the Quiché department during 2012 and 2015 included, among other components, a Book Bank from which children could borrow books and parent workshops in which staff encouraged parents to read to their children. These efforts could be strengthened by studies which examine the specific ways in which K'iché parents approach the task of sharing a book with their children.

Previous Studies on Parent-Child Interactions in Mayan Communities

The current knowledge base to inform initiatives aimed at involving Mayan parents in their children's literacy development is limited. Mayan communities were the focus of influential studies of socialization practices during the 1980s and 1990s (Gaskins, 1996, 1999; Rogoff, 1990, 2003). During these decades, researchers reported that Mayan children learned and advanced their skills and understanding through careful observation and by "pitching in" during activities that were central to the functional needs of the community –a process named by Rogoff (2003) as "intent participation". In intent participation, more mature experts display their skills and novices take the role of keen observers of their actions. Adults rarely modify an activity for instruction and while they will often assist children when they face difficulties in carrying out a task (e.g., by adjusting their position to correct an error or refine a movement), they will seldom offer verbal explanations or feedback. This socialization model expects that children will adapt to unmodified situations and is thus considered a "situation-centered" approach. Intent participation stands in contrast to the Western "child-centered" socialization model in

which adults use explicit verbal explanations and direct children's attention and motivation to learn in situations that have been purposefully modified for instruction.

Studies during the 2000s showed that the introduction of schooling to these communities was related to shifts in mother-child interactions. Mayan mothers with more extended schooling were more likely to interact with their toddlers around a novel object in ways that resembled the Western "child-centered" approach by giving more verbal instructions and using mock excitement and praise to motivate their children's involvement in their own agenda, than mothers with little or no experience in school (Rogoff et al., 1993). With older children (between the ages of 6 and 12) schooled mothers were more likely to manage children's contributions in a problem-solving discussion through the use of known-answer questions, than mothers who had not attended school (Chavajay, 2006). Specifically, Chavajay (2006) noted that the way in which the schooled mothers participated in the discussion resembled the Initiation-Response-Evaluation or I-R-E discourse pattern prevalent in Western schools in which the teacher asks a question, the student answers the question, and the teacher evaluates the answer (Mehan, 1979). In contrast, mothers who had not attended school took on a less managerial (i.e., more collaborative) role allowing children more opportunities to take the initiative to participate by posing more open invitations to the group—a type of interaction which resembles indigenous egalitarian forms of engagement (Chavajay, 2006).

Two ethnographic studies in Mayan communities suggest that mothers who have attended school may display behaviors that resemble those of teachers around texts. In an ethnographic study conducted in a Mam-speaking Mayan community, Hamberg (2011)

found that literacy instruction in the first three grades of primary school consisted mostly of writing of *planas* in which children wrote a letter, word or syllable many times until they fill a page. Texts were read exclusively in Spanish and Mam was only used to manage children's behavior. When children read texts, the teachers emphasized fluency in reading rather than comprehension, correcting mispronunciations without discussing the meaning of the text. In classroom activities where children were assigned to read in pairs, the teachers discouraged them from talking to each other about what they were reading, directing them instead to focus on listening to each other read aloud. The author observed a similar approach to reading texts in the household of one mother who had some schooling experience; when the child was reading an oath of allegiance this mother made comments on his fluency and asked him to recite the allegiance without any discussion of its content.

Another ethnographic study in a Mayan community in Yucatan reported a similar approach to literacy at school and between one mother and her 7-year-old child (Azura & Reyes, 2011). Literacy instruction in the first grade in this community was also limited to "drilling exercises on isolated features of written language" (p. 187). Just like in Guatemala, in Mexico the local Mayan language was only used at school for directives and clarifications but not for instruction. In cases where texts were read, there was no discussion around them, as children were expected to answer comprehension questions independently and in writing. Observations in the household of this child showed that her mother, who had a third grade education, would often take control of homework interactions by dictating the answers to the problems from the textbook without engaging in any discussion. These studies suggest that Mayan parents who have attended school

may resemble the common ways of interacting with texts in rural school serving Mayan communities in which discussion of meaning is not encouraged. Nevertheless, to the extent of my knowledge, no studies have specifically focused on characterizing the ways in which Mayan parents may approach the task of sharing a book with their children.

In sum, despite vast research on child socialization patterns in Mayan communities in Guatemala (e.g., Gaskins, 1996, 1999; Rogoff, 2003), how rural Mayan parents interact with their children around a storybook has not been investigated to date. The traditional child socialization pattern in Mayan communities relies on intent participation, an approach in which children learn by keenly observing as more mature experts complete tasks without much reliance on verbal communication (Rogoff, 2003). Previous studies suggest that Mayan mothers who have attended school may adopt school-sanctioned ways of interacting with children during different types of activities (i.e., exploration of a novel object, problem-solving discussion and homework; Azuara & Reyes, 2011; Chavajay, 2006; Hamberg, 2011; Rogoff et al., 1993). Nevertheless, to my knowledge, no studies have examined the ways in which parents from different schooling levels may enact book-sharing with their children. This topic is particularly intriguing and worth investigating in Mayan communities, given that book sharing is essentially a child-centered, verbal activity that may not be well-aligned with the traditional “intent participation” approach in which parents do not rely on oral language in their interactions with their children. In addition, the comparison between parents with different schooling levels will expand our knowledge of book-sharing interactions in a context in which not all parents will be expert in this task.

In what follows I provide an overview of previous studies on parents' and children's participation in book-sharing interactions, paying particular attention to documented differences among parents from different cultural groups and educational levels.

Parent-child Book-Sharing: Interactional Styles and Content of Parental Talk

Studies on book-sharing interactions have largely focused on two analytic dimensions: parents' interactional style and content of talk. The first type of studies examined the extent to which parents encourage their children's participation in co-narrating the story with them (e.g., Capse, 2009; Melzi & Caspe, 2005; Melzi, Schick, & Kennedy, 2011). The second type of studies emphasized a discussion of the content of parental talk during book-sharing (De Temple & Tabors, 1994; Haden, Reese, & Fivush, 1996; Reese, Cox, Harte & McAnally, 2003). In the next section I discuss studies which have approached issues of variability across and within cultural groups along these two dimensions.

Parents' interactional style during book-sharing interactions. Experimental studies with middle-class and low-income mothers and teachers in the United States and Mexico during the 1980s and 90s established that *dialogic reading*, a reading style characterized by high levels of interaction between the child and the adult and an emphasis on encouraging the child to tell the story through the use of questions, repetitions and elaborations of children's utterances, benefits 2- to 4 year-old children's language skills, especially their expressive vocabulary (e.g. Whitehurst, Arnold, et al., 1994; Whitehurst, Epstein et al., 1994; Whitehurst, Falco et al., 1988). In this style, parents co-narrate the story with their children supporting them to progressively take the

narrator role. While this reading style has been often advocated as the most desirable to expand children's language and prepare them to become skilled readers, studies examining naturally occurring ways of sharing books have shown that this style is not universal and that other styles may also be predictive of different language and literacy learning outcomes.

Parents from different social classes and cultural groups may in fact prefer a book-sharing interactional style in which they take on the role of the sole narrators. A set of studies exploring the narrative roles adopted by mothers and preschool children while sharing a wordless picture book, found that a *storybuilder* style, in which mothers co-construct the story with their 3- and 5-year-old children, was more common among European American middle-class mothers (Melzi & Caspe, 2005; Melzi et al., 2011) than amongst middle-class Peruvian mothers. However, middle-class Peruvian mothers living in their home country and low-income Dominican and Mexican mothers living in New York City preferred a *storyteller* style, in which they took the role of the primary narrator (Caspe, 2009; Melzi & Caspe, 2005; Melzi et al., 2011). Caspe (2009) found that these two styles were predictive of different emergent literacy skills amongst low-income Latino 4- and 5-year-old children. Children of storybuilders had more sophisticated narrative skills than children of storytellers, measured as the number of evaluations included in the narratives (i.e., expressions of emotion, personal judgments, subjective information, and speculations about events in the story such as “la rana está brava” [The frog is mad]). In contrast, children of storytellers had better letter-sound identification skills and print concepts. The author argued that by being exposed to rich and evaluative language, which was often melodic and repetitious, the children of storytellers may have

become more attuned to the composition and properties of letters and words, which in turn may have facilitated recalling letters. On the other hand these children may have known more about concepts about print because they were used to hearing and complete story rather than one interrupted by questions and were thus more accustomed to thinking about aspects of a book as a cogent story.

The pioneering work of Melzi and collaborators has opened a new line of work aimed at examining differences in the way that parents engage children as interlocutors in book-sharing interactions across cultural groups. However, there are three important gaps in this line work that need to be addressed. First, the authors interpreted their data to show associations between specific book-sharing styles and distinctive cultural patterns of parent-child interactions in a society, this equivalence between book sharing styles and cultural patterns needs to be taken with caution. According to Caspe (2009) and to Melzi et al. (2011) the observed differences in the interactional styles between Latin American and European American parents may be explained by cultural orientations in how adults guide children's participation in everyday activities (Rogoff, 1990, 2003). The authors argued that the sharing of the narrator role present in the storybuilder style could be explained by a "child-centered" approach prevalent amongst middle-class U.S. parents, in which adults treat children as equal conversational partners and modify their speech to match children's abilities. In line with this orientation, European American mothers preferred the style in which children were treated as equal conversational partners who co-constructed the narrative with the adult. In contrast, the clear distinction between narrator and audience present in the storyteller style displayed by the majority of middle-class Peruvian and low-income Latino dyads could be explained by a "situation-centered"

approach in which roles vary depending on who holds the “expertise” and in which children are commonly expected to learn by observing and listening-in until they are ready to contribute in an adult-like manner (i.e. the intent-participation socialization pattern described by Rogoff, 1990; 2003). Following this rationale, the authors argued that in the case of book-sharing interactions Peruvian and Latino mothers took the role of the main narrator due to their higher level of expertise as readers and storytellers, and expected their children to take the role of an active audience (Casper, 2009; Melzi et al., 2011). However, this interpretation calls for caution as the “situation-centered” approach originally described by Rogoff (1990, 2003) referred to observation and participation interactions in which oral language was not relied upon. Thus, these interactions are not necessarily equivalent to the non-child-centered but highly verbal interactions around books documented in Casper’s and Melzi’s studies. In addition, while in the samples studied by these authors, the mothers arguably had more experiences sharing books than the ones that their children had, not in all societies parents are more expert readers. Hence, the lack of research with parents from “situation centered” societies who may not necessarily have more schooling experiences than their children is an important gap in this previous line of work. .

A second gap in this line of work lies in the use of wordless picture books. The use of wordless books restricts the extent to which these findings are generalizable to interactions around books with text. A study using a storybook with text amongst young welfare recipient mothers of preschoolers (child age between 27 and 63 months old) in the United States elucidated four different styles: *straight readers*, who focused on reading the text aloud without pausing to discuss the book; *standard interactive readers*,

who paused during the reading and discussed the story; *non-readers*, who turned the pages and discussed the book without reading any words from the book; and *recitation readers*, who asked their child to repeat the book back to them phrase by phrase (De Temple & Tabors, 1994). Results from studies that used wordless picture books and those that used storybooks with text reveals that the extent to which parents engage their children in the interaction constitutes a dimension that is relevant in both elicitation contexts. Yet, storybooks with texts require considerations of additional aspects to fully capture the specifics of different book-sharing interactional styles.

The third gap in this line of work is the limited age range studied in prior work. Most studies have focused on preschoolers (ages 3 to 5), that is, children who are not yet in school. Investigating how parents interact with children around books when children start school (ages 6-7, kindergarten and first grade) is important given previous findings that parents adjust the ways in which they interact around a book across time (e.g., Fletcher & Reese, 2005; Sénéchal, Cornell & Broda, 1995)

The current study contributes to our knowledge on parent-child book-sharing by characterizing parental interactional styles around a book with text in communities in which the traditional socialization pattern is not reliant on verbal communication and in which not all parents have necessarily had extensive experience with books.

Content of parental talk during book-sharing interactions. In addition to parent interactional style, the focus of parental talk on different types of content during book-sharing interactions has also been analyzed in a number of studies (e.g., Curenton, Craig & Flanigan, 2008; De Temple, 1994; De Temple & Tabors, 1994; Haden et al., 1996; Reese et al., 2003). During book-sharing, parents and children may talk about what

they see before them, such as when they label objects or describe pictures from the book. Given that the information is perceptually present in the here-and-now, this type of talk has been characterized as “immediate talk” (Snow, 1991). When engaging in immediate talk, parents and children rely on shared physical contextual cues often using non-verbal supports, such as pointing or gestures. In contrast, parents and children may engage in “non-immediate” talk that moves away from what can be seen on the page or the surrounding physical context, for example when they make inferences, judgments or connections between the story and past experiences or the real world. Non-immediate talk refers to information which is not present. Given that it requires using language as its own context, it demands more linguistic resources to discuss non-visible ideas, emotions, and events. Thus, non-immediate talk is typically more linguistically and cognitively demanding than immediate-talk.

Parents vary in their focus on immediate and non-immediate talk during book-sharing interactions both within and across cultural groups. De Temple and Tabors (1994) identified two different approaches to the task of sharing a book amongst young mothers (ages 16 to 21) receiving welfare and their children (between 27 and 63 months) in the United States. One group assumed that books were an opportunity for the child to learn labeling, counting and colors, and thus focused on book-related immediate talk. The second group assumed that books were also a source of stories and of information about the world, and therefore included the use of non-immediate talk (De Temple & Tabors, 1994). Haden and colleagues (1996) identified two similar styles amongst European American middle class parents of children ages 3 and 5. *Describers* focused on asking questions and providing information on labels and descriptions of pictures. In contrast,

comprehenders focused on asking questions and providing information that went beyond the text such as inferences, predictions, general knowledge and print conventions. Reese and colleagues (2003) also found *describer* and *comprehender* styles amongst middle-class parents from European descent of 3- and 5-year-old children in New Zealand.

While the use of non-immediate language during book-sharing has been related to skills that facilitate children's literacy development, particularly their reading comprehension; there is some evidence that suggests that some children might also benefit more from book-related immediate talk. De Temple (1994) found that the extent to which low-income mothers with a high school education or less in the United States used non-immediate talk while reading with their children at age 3½ was related to children's later performance on vocabulary, story comprehension, definitions and emergent literacy. Similarly, Haden and colleagues (1996) found that the children of comprehenders had higher story comprehension scores than children of descriptors. Nevertheless, a study using an experimental design with a group of 4-year-old children attending state-sponsored preschools in New Zealand found that the describer and comprehender styles had different benefits in vocabulary gains according to the child's initial vocabulary level (Reese et al., 2003). This study established that while children with higher vocabulary scores showed more vocabulary gains by being exposed to a comprehender style, children with lower initial vocabulary scores showed more growth on vocabulary if they were read to using a describer style. This is consistent with the knowledge base on vocabulary development, as children who are still focused on acquiring nouns will benefit from the more noun-oriented describer style, whereas children with a higher linguistic development will benefit from the high-demand

discussion in the comprehender style which exposes them to more sophisticated vocabulary and provides them with opportunities to use new words themselves (De Temple & Snow, 2003).

Parents' preference for a describer or a comprehender style during book-sharing may depend on their own literacy skills. De Temple and Tabors (1994) reported that amongst a sample of young mothers (ages 16 to 21) receiving welfare, those with higher literacy scores were more likely to use non-immediate language and less likely to use immediate language than those with lower literacy scores during a book-sharing interaction with their children (between 27 and 63 months). In a study with a more diverse sample of mothers in terms of child age (ages 23 to 44), income (in poverty, near to poverty and above poverty) and educational levels (less than high school to college), Curenton and colleagues (2008) found similar results. Mothers with lower literacy skills were more likely to focus on descriptions of the pictures and the settings as they read and told stories to their children (age 33 to 66 months). In contrast, mothers with higher literacy skills made more comments about characters' psychological states, predictions and explanations of story events, and drew more connections between different events in the story and between the story and real-life events.

Other studies signal that parents' schooling experiences and the ways in which they were taught to read may shape the type of content that they focus on while they share a book with their children. Studies with low-income Latino parents, most of whom were first-generation immigrants who had been educated in rural contexts in Mexico and Central America have found that parents with low levels of formal education may prefer to focus on content that stays close to the texts such as questions about labels or

descriptions, rather than those which required going too far away from the text such as predictive or evaluative questions (Janes & Kermani, 2001) or on the more mechanical aspects of reading such as letter, word or phrase recognition rather than the meaning of the story (Gallimore & Goldenberg, 1993). Gallimore and Goldenberg (1993) argued that this attention to the surface features of the text was consistent with a view of the purpose of early literacy activity as “correct and precise word recognition at the most literal and concrete level” (p. 326). This view is probably a result of the parents’ early literacy experiences in school, which focused almost exclusively on learning phonetic rules. These studies signal the importance of using books with text in studies aiming at characterizing book-sharing styles. They also highlight the need of including codes to capture extratextual talk that is focused on the process of sharing a book and/or the mechanics involved in reading to distinguish them from content-focused narrative utterances.

Taken together, these studies signal that parents may focus their extratextual book-relevant talk on three types of content: 1) immediate talk, such as labels or descriptions; 2) non-immediate talk, such as inferences, predictions, judgments, and connections between the story and past experiences or the real world; and 3) talk about the more mechanical aspects of reading such as letter, word or phrase recognition. Parents’ literacy skills and schooling experiences may be related to the content that they focus on during the interaction.

The present study

The goal of this study is to investigate book-sharing interactions amongst Mayan parents with different levels of schooling and their first-grade children. These parents and

their children come from rural communities where indigenous ways of life are increasingly coming into contact with schooling and other western practices. Two research questions guide this study:

1) What are the book-sharing styles of rural Mayan parents –as captured by their interactional roles and the content of their talk– as they share a book with their first-grade child?

2) Do rural Mayan parents with different schooling levels vary in their book-sharing styles?

It is unknown whether Mayan parents will prefer an interactional role of the main narrator, or one in which the role of narrator is shared with the child through the use of questions. Given previous studies on mother-child interactions in Mayan communities (Chavajay, 2006; Rogoff et al., 1993), parents with schooling are expected to display interactional styles that resemble teacher-student interactions in their use of strategies, such as known-answer question and verbal feedback. Parents with no schooling are expected to be less managing of their children's participation through the use of such strategies. In terms of content, parents with fewer years of schooling are expected to focus more on immediate content such as labels and descriptions, than parents with more years of schooling. However, given previous ethnographic observations in Mayan schools and homes (Azuara & Reyes, 2011; Hamberg, 2011), parents with more years schooling are not expected to focus on the meaning of the story, but rather on the more mechanical aspects of sharing a book (e.g., correct pronunciation, letter identification). Thus, neither schooled nor unschooled parents are expected to focus on non-immediate content such as evaluations, judgments or inferences.

Method

Setting

Participating parents were recruited from four rural public primary schools in the Quiché department of Guatemala in which an early literacy intervention was being implemented. More than 98% of the population in the four villages in which the schools were located self-identified as indigenous in the last national census (INE, 2002). The four villages, which I refer to as the Mountain, River, Valley and Road villages, differed in their population size and accessibility, and the year in which the primary school was first opened within the village. Data on the population, accessibility and the data of inauguration of the school within the village are provided in Table 1.

Table 1
Population, Accessibility and Date of Inauguration of the School in the Four Villages

Community	Population ^a	Distance from urban center ^a	Available transportation	Date of inauguration of the school
Mountain Village	800	15 km	Private pick-ups	1999
River Village	906	7 km	4 buses per day	1971
Valley Village	440	8 km	6 buses per day	1974
Road Village	2,541	18 km	Buses every 10 minutes	1965

^a Data obtained from characterization documents produced by the Municipality's Office in 2012

^b Data provided by the Departamental Office of Education

In three of the villages, the River, Valley and Road villages, the school was inaugurated before the participating parents were old enough to attend school (1971, 1974 and 1965, respectively). In the most remote village, the Mountain village, primary schooling was inaugurated in 1999 when the participating parents were between the ages of 6 and 13 years-old. Thus, in order to attend school before 1999 the older parents would

have had to walk for more than an hour to another village that had a school. Notably, in spite of differences in the time at which school became available within the village, there were parents with and without schooling in all four villages (see description of Participants).

Official records state that many residents in the four villages travel seasonally to the coastal region to work for wages as laborers in coffee or banana plantations and many others have migrated either to Guatemala City or to the United States and send remittances to their families. Other options for families to earn money have also become available within the community: harvesting additional crops like apples, peaches, carrots and avocados; producing handcrafts such as traditional woven blouses (*huipiles*) and skirts (*cortes*), or more recently mantle pieces and cloth animals for tourists; serving as the middle man and providing transportation to sell these products in the urban center; and setting up small stores within the village. There are no official records on the prevalence of these occupations for each of the villages; however, there were visible differences amongst the four communities. The three more remote villages (Mountain, River and Valley) each had 3 small convenience stores. In comparison, the Road village had 13 businesses including three restaurants, two stores which sold school supplies, and two booths with computers and internet connection. Thus, all communities had some level of environmental print due to the presence of these businesses, but the Road community had a higher presence of environmental print than the other three communities. The majority of the participating families (26 of 30) had access to a cell phone within the household and some of the families (7 of 30) mentioned having a television set; however, only people in the largest and more connected community have

access to computers with connection to the internet in the two booths that provide this service.

Participants

Participants in this study were 30 parents and their first grade children. Children were between the ages of 7 and 9 at the time of data collection (M age = 86.8 months; SD = 7.0; range = 67.4 – 99.3). Parents were contacted during the first weeks of school (late January and early February of 2015) with the help of staff from Leer Juntos, Aprender Juntos, an early literacy intervention implemented by Save the Children from 2012 to 2015 in the four participating villages. This multiyear intervention as implemented in Guatemala in 2015 consisted of two components: a school and a community component. The school component consisted of four teacher workshops on literacy instruction strategies for first, second and third grade teachers per year followed by monthly classroom supervision/coaching. The community component consisted of three parent workshops per year, and weekly afterschool reading camps which provided children with the opportunity to borrow books from a Book Bank. Only parents of 1st to 3rd grade students were eligible to participate in the workshops, without capacity constraints (i.e., all parents of children in these three grades were invited to attend the workshops). At the start of data collection (beginning of a new academic year), none of the participating parents had attended parent workshops and only two of the thirty children had attended afternoon reading camps and occasionally borrowed books in the previous year (i.e., 2014). Parents were eligible to participate in this study if: a) their child was entering the first grade for the first time; b) they did not have any other children who had been in the first, second or third grade in the three prior years (i.e. any parent who, as part of the Leer

Juntos, Aprender Juntos intervention had attended any of the parent workshops was excluded); and, c) they were the caregiver most likely to attend the parent workshops.

I contacted all eligible parents in person with the help of an interpreter and the support of principals, teachers and/or community volunteers from the intervention. Across the four communities 40 parents were eligible and 34 agreed to participate. However, in the Road village four of the parents who met the eligibility criteria at first contact, participated in the first workshop before I could interview them, making them no longer eligible. The final sample included 30 parents, 27 mothers and 3 fathers. Half of the children were girls ($n = 15$). Roughly 67% of the children ($n = 20$) were first born, 13% ($n = 4$) were only child, and 20% ($n = 6$) were the youngest in their families. Roughly 77% ($n = 22$) of the children had been enrolled in the kindergarten the prior year.

There were 3 groups of educational attainment amongst the parents: 12 parents (all mothers) had *no schooling experience*; 10 parents (8 mothers and 2 fathers) had attained some primary school education *1 to 3 years of schooling*; and 8 parents (7 mothers and 1 father) had gone beyond primary school attaining *6 years or more of schooling* (i.e., 6 years, 9 years or 12 years). Parental schooling was not considered as a criterion during the recruitment process. Thus, these three categories were set post-hoc and correspond to categories used in the national census to identify levels of schooling in rural areas. The distribution of parents by level of schooling in this sample is very similar to that reported for rural populations in Guatemala in the last census: 40% of the study participants did not attend school compared to 38.8% at the population level; 60% of the participants had at least one primary grade compared to 53% at the population level; and,

6.7% of the participants had at least one secondary grade compared to 6.5% at the population level (INE, 2002). In three of the four villages (Mountain, River and Road villages) there were participants from each of the three groups of schooling. In the Valley village there were no participants with 6 years or more of schooling experience. There were no statistically significant differences on the average age of parents in these three groups, $F(2, 27) = 1.93, p > 0.10$. However, none of the participants over the age of 35 had 6 years of schooling or more. Table 2 presents the children's socio-demographic information and Table 3 the parents' socio-demographic information for the three parental schooling groups.

Table 2

Child socio-demographic information by parental schooling level

	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Total	12	10	8	30
Boys	4	6	5	15
Oldest child	9	7	8	24
Child mean age in years, months (range)	7,4 (6,10 - 8,0)	7,1 (6,6 - 8,3)	7,1 (5,7- 8,3)	

Table 3

Parent socio-demographic information by parental schooling level

	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Total	12	10	8	30
Fluent in Spanish	3	7	6	16
Fathers	0	2	1	3
Parent mean age in years (range)	31.3 (22 - 50)	36.1 (26 - 46)	29.0 (25 - 34)	

Family Composition, Language Exposure and Occupational Backgrounds by Parents' Schooling Groups. As can be seen in Table 4, the majority of the participants lived in a nuclear family arrangement consisting of two parents and their children (17 of 30). This family composition was the most common in the three groups of schooling. Contrary to expectation, there were no statistically significant differences on the average number of children between these three groups, $F(2, 27) = 0.09, p > 0.10$.

Table 4
Family composition by parental schooling level

Family composition	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Nuclear family	7	5	5	17
Extended family with spouse	1	2	2	5
Extended family without spouse	4	2	1	7
One parent and children		1		1
Mean number of children,	2.5	2.7	2.6	
range	range 1 to 4	range 1 to 5	range 1 to 4	
Total	12	10	8	30

As can be seen in table 5, with the exception of one mother who had 12 years of schooling and worked as a shopkeeper, all of the participating mothers had occupations that did not require schooling or fluency in Spanish (i.e., weavers and housekeepers), even if they had attended school. The three participating fathers were a farmer and traders of traditional skirts (*cortes*). Table 7, shows that most of the spouses also worked in occupations that did not require schooling or fluency in Spanish (i.e., weavers, housekeepers and farmers) even if they had attended school; with the exception of one wife and a husband who worked as teachers, an occupation that required 12 years of schooling until recently.

Table 5
Participants' occupations by parental schooling level

Participants' occupation	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Weavers	5	7	2	30
Housekeepers	7	1	4	15
Farmer		1 ^a		24
Trader		1 ^a	1 ^a	
Shopkeeper			1	
Total	12			

^a Participant was a father.

Table 6
Other caregivers' occupations by parental schooling level

Other caregivers' occupation	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Weavers	2	1		3
Housekeepers		1 ^a	1 ^a	2
Farmers	5	2	1	8
Bus attendant	1		1	2
Construction			2	2
Traders		2		2
Seller in a store		1	1	2
Barber		1		1
Teacher		1 ^a	1	2
Total	8	9	7	

^a Wife of a participating father.

In roughly half of the families (14 of 30) the child was only exposed to K'iché at home, though this was far more common amongst unschooled than schooled participants (see Table 7).

Table 7
Children's language exposure by parental schooling level

Language exposure	Parental schooling level (years)			<u>Total</u>
	0	1 – 3	6 – 12	
Only K'iché	9	3	2	14
Both parents speak in K'iché and Spanish	1	5	3	9
One parent speaks only in K'iché and one parent in Spanish and K'iché	2		2	4
The parent speaks in Spanish other adults in K'iché		1	1	2
One parent speaks only in K'iché and one parent only in Spanish		1		1
Total	12	10	8	30

Data Gathering Procedures

I met the parent-child dyads accompanied by an interpreter during the first weeks of the beginning of the school year (late January and early February) before attendance to any of the parents workshops. Data collection took place at the parents' convenience either in their home (n = 16) or in a quiet room at their child's school (n = 14). Either I or the interpreter, explained to the parents that I was interested in learning more about the early literacy intervention that was taking place in the school and in this initial meeting I wanted to learn more about how the parents "used" books with their children at home (the word "read" was avoided given the low literacy levels of many of the participating parents). The parent and the child were told that if they agreed to participate, we would record their voices and use a video camera so we would not have to make too many notes while they shared the book. All dyads agreed to be audio-recorded and 29 dyads agreed to be videotaped.

The dyads were asked to share the Spanish version of the picture book *The Pig's Picnic*, "El día de campo de Don Chanco" (Kaza, 1991) as they would normally do.

This book was chosen to increase the ecological validity of the task by asking parents to interact with a book that is prototypical of the books made available to parents and children through the early literacy intervention. The book has 30 pages with a total of 34 sentences. The pictures in the book allow inferring the main outline of the story without having to refer to the text. This was important because it would allow parents who were not able to read to still make sense of the story. The plot of the story is as follows. Mr. Pig wants to invite Miss Pig to a picnic. On his way there, Mr. Pig borrows the Fox's tail, the Lion's mane and the Zebra's stripes to look better. When he gets to Miss Pig's house she is terrified and claims that if he doesn't leave she will call Mr. Pig to "take care" of him. Mr. Pig returns everything to his friends and they both enjoy a picnic in which Miss Pig shares all about the monster who visited her. Mr. Pig doesn't say anything to avoid disappointing her.

None of the children or the parents had seen the book. The book was in Spanish rather than in K'iché because: the few available books in K'iché from the intervention were for older grades, and given the limited provision of high-quality bilingual education in Guatemala any adults who are able to read are more likely to read in Spanish than in K'iché. Parents were told that they should feel free to share the book in the language that they preferred and could take as much time as they needed and were left alone with the video camera.

Language Data Transcription. Audiotapes were transcribed using the Codes for the Analysis of Human Language (CHAT) conventions from the Child Language Exchange System (CHILDES; MacWhinney, 2000). The data were segmented into units at the utterance level. Utterances boundaries were identified by the presence of a

grammatical closure, intonation contour, or pause. A research assistant, a native Spanish speaker with a high school degree, transcribed the book interactions in which the parents and the children spoke in Spanish ($n = 9$) and two native K'iché speakers transcribed and translated the interactions in which the dyads spoke in K'iché directly to Spanish ($n = 21$). In cases in which the dyads spoke in the two languages the interpreters identified the specific words that were said in Spanish in the transcript. The research assistant noted the exact time of the recording when the parents spoke in K'iché for the interpreters to complete the transcription. The full set of transcripts was verified by a different person from the original transcriber, the author for the Spanish transcripts and a second interpreter for the K'iché transcripts.

Book-sharing exchanges were segmented into pre-reading, book-reading and post-reading discussions (see Melzi & Caspe, 2005 for a similar procedure). Pre-reading exchanges included all dialogue from the moment the recording began until the parents opened the book and either read or referred to a drawing in the first page of the book. Book-reading referred to all reading and/or discussion related to the pictures in the book. This segment only included the first pass through the book, from the first reference to a picture in the first page of the book to the last time they referred to the last page and/or closed the book (and in a few cases, before they started it again). Post-reading exchanges consisted of all dialogue after the discussion of the final page in the book. Given that not all dyads engaged in pre- and post-reading exchanges, pre-reading and post-reading segments were not analyzed further.

Coding Categories. Maternal and child language was coded at the utterance level for two language components –interactional/pragmatic functions and content based on an

adaptation of the coding scheme originally devised by Melzi and Caspe (2005), and later revised by Caspe (2009) and Melzi et al. (2011). The unit of analysis was the utterance in all cases.

1. *Interactional role/pragmatic functions*. Each utterance was coded for pragmatic intent using four mutually exclusive codes: *provision of information* (i.e., utterances that provided information through the use of declarative statements and tag questions); *request of information* (i.e., utterances that elicited information through the use of open-ended questions or fill-in-the-blank statements); *conversational continuations* (i.e., utterances whose primary purpose was to maintain the flow of the conversation and that did not add any new narrative content, including confirmations, corrections, clarifications, backchanneling such as “mmhm,” and full or partial repetitions of the partner’s previous utterance); and, *reading of the text* (i.e., all utterances in which the parent read straight from the text). The inter-rater reliability for this interactional/pragmatic component was calculated by double coding 20% of transcripts between the author and a research assistant, resulting in a Cohen's Kappa of .97.

2. *Content*. Two mutually exclusive codes identified whether the content was of narrative (i.e., talk related to the book's plot) or non-narrative type.

Narrative content was further divided into six mutually exclusive subcodes:

- *Labels* were any utterances that provided or requested the names of pictures in the book including objects and characters (e.g. “esta es una canasta” [this is a basket], “él es Don Chanco” [this is Mr. Pig]).

- *Descriptions* were utterances that provided or requested information about the actions of the characters in the picture (e.g., “está recogiendo una flor” [he is picking a

flower]) or location of objects in relation to each other (e.g., “está encima del árbol” [he is on top of a tree]). Descriptions were identified as occurring in the present or near present tense and characterizing an activity immediately visible in the booksharing context.

- *Events* were utterances that provided or requested actions that moved the plot forward and therefore were told in the past tense (e.g., “El león le prestó su pelo” [the lion lent him his hair]).

- *Evaluations* were utterances that provided or requested judgment, subjective information, or speculations about the story world events. Evaluations included descriptions of internal states, intentions, predictions and causality (e.g., “él se puso todo eso para que le cayera bien a la cerdita” [he wore all of that so that Miss Pig would like him])⁸.

- *Checking for comprehension* were utterances intended to check the child’s comprehension of the story (e.g., “¿ya me entendiste?” [did you understand me?])

- *Knowledge of Spanish language and vocabulary* were utterances which provided information about the gender use in Spanish and definitions of vocabulary. These utterances were considered as part of the narrative category as they facilitated the child’s comprehension of the story (e.g., “esta es la cerda porque es mujer” [this is the girl pig, she is a woman]; “melena son los pelos del León” [the mane is the lion’s hair]).

Non-narrative content was broadly defined as any utterance that did not occur in the world of the book. Four mutually exclusive codes were used:

⁸ Given that the unit of analysis was the utterance I established a coding hierarchy such that if an event and an evaluation occurred in one utterance, such as in the case provided in the example, the utterance would be coded as an evaluation.

- *Unrelated* utterances identified any talk that was entirely unrelated to the narrative or the cognitive demands of interacting with a book, generally comments about behaviors related to the task itself (e.g., “no te tapes la boca” [do not cover your mouth], “habla más fuerte [speak louder]).

- *Personal experience* referred to utterances that requested or provided connections between the child’s experiences and the story world (e.g., “es casi igual a lo que usamos para preparar papas” [it’s almost the same as what we use to prepare potatoes]).

- *General knowledge* referred to comments providing or requesting information about the real world (e.g., “es zacate, crece en el camino” [this is grass, it grows by the road])

- *Print and reading conventions* were utterances that referred to the code-based skills involved in reading and about the process of sharing a book and/or learning to read. This category consisted of six subcodes: *alphabetic knowledge* (e.g., “¿qué letra es esta?” [what is this letter?], “estas son las letras” [these are the letters]); *recitation reading* (e.g., asking the child to repeat what was just read); *knowledge about books* (e.g., “¿de qué te sirve leer la portada?” [what is the use of reading the cover?]); *commenting on reading ability* (e.g., “si pudieras leer leerías esto”, [if you were able to read you would read this]); *instructions/making sense of the task* (e.g., “vamos a leer qué, qué están haciendo”, [we are going to read what, what they are doing], “aquí ha de decir el nombre de este” [here it must say the name of this one]), “¿es lo que te enseñan en la escuela?”, [is this what they teach you at school?]); and *communicating educational expectations* (e.g., “vos tenes que aprender a leer y a escribir”, [you have to learn to read and write]).

Inter-rater reliability for the content component (i.e., narrative and non-narrative codes) was also calculated by double coding 20% of transcripts between the author and a research assistant, resulting in a Cohen's Kappa of .89.

Analytic Approach

Parents differed in the time spent on the book-sharing portion and the total number of utterances they produced. As an initial step I conducted Analyses of Variance (ANOVAs) to test for differences in time spent on the task and the total number of parent utterances across the three groups of schooling (i.e., no schooling, 1 to 3 years, and 6 to 12 years).

I used cluster analyses, a person-centered approach to identify parents' book-sharing styles as represented by their interactional style or the narrative role that they adopted during the interaction, and by the content of their talk or the type of content utterances that they focused on during the interaction (Caspe, 2009; Hayden, 1996; Melzi & Caspe, 2005; Melzi et al., 2011; Reese et al., 2003).

Following procedures by Melzi and colleagues (2011), I collapsed codes across interactional/pragmatic function and content into four main variables: elaborative requests for narrative information; elaborative provision of narrative information; conversational talk; and non-narrative related information. Given differences in literacy levels amongst parents in this population and the interest in exploring the extent to which parents were spending time reading from the book in proportion to time devoted to extratextual talk, during the interaction, the code identifying direct reading of the text was included as a fifth variable.

To identify the groups of parents in terms of their interactional style, I used two subsequent approaches to cluster analysis: hierarchical cluster analysis (Ward's linkage method squared Euclidean distances) and partitioning clustering analysis (k-means iterative). I first performed hierarchical clustering analyses (Ward's linkage method with squared Euclidean distances) on mean proportions of the five major parental codes to determine the number of clusters in the sample. Proportions were used to control for the total amount of talk produced by parents. The optimal number of clusters was identified by visually inspecting the dendrogram and examining two fit statistics: the pseudo-F (Calinski & Harabasz, 1974) and the pseudo-t2 (Duda & Hart, 1973). In order to improve the accuracy of the assignment of parents to clusters, I then used partitioning clustering analyses (k-means iterative). Unlike Ward's linkage method, a k-means iterative approach allows the reassignment of individuals to a different cluster upon identifying a better fit in a different profile in a later iteration. To reduce the probability of choosing locally optimal solutions, the algorithm was run 50 times using randomly selected seed as centroids (Steinley, 2003), and I used Calinski and Harabasz's (1974) stop rules to select the final solution. Stability and homogeneity of the final cluster solution was determined using the Rand index (a measure of agreement between clustering results and the degree of overlap for multiple clustering; Gordon, 1999).

In line with this study's interest in characterizing the content of parent's talk, I conducted a second cluster analysis including the six narrative codes (labels, descriptions, events, evaluations, checking for comprehension and vocabulary) and all codes on non-narrative content except unrelated utterances (personal experience, general knowledge, and print and reading conventions). I used proportions to control for the total amount of

talk produced by the parents and used the same clustering methods that I used during the analysis for parental narrative roles.

In order to explore differences in the book-sharing styles across parents with different schooling levels, I identified the number of parents from each of the three schooling groups (i.e., no schooling, 1 to 3 years, and 6 to 12 years) who were placed in each of the clusters representing different book-sharing styles in terms of narrative role and content of talk, and cross-tabulated these numbers. Due to low levels of statistical power I did not conduct chi square significance tests.

Results

Preliminary Descriptive Analysis

There was great variability in the language used during the interaction, the time spent on the task and the total number of utterances produced by the parents.

Language use. Almost two thirds of the parents (63%, $n = 19$) spoke in K'iché during the interaction. Nine out of these parents, who did not read any words from the book, used K'iché with sparse use of individual words in Spanish (usually names of animals or words about the video equipment). The other nine parents read in Spanish and talked with their children mostly in K'iché and one mother read in Spanish and talked to her child using both K'iché and Spanish. The remaining 11 parents (36%) used mostly Spanish. Of these 11 parents, two did not read any words from the book and talked in Spanish, and nine read and talked in Spanish. The vast majority of parents with no schooling used K'iché (9 out of 11), whereas about half of the parents with some schooling used this language (10/19).

With a few exceptions, the children used the same language as their parents during the interaction. The exceptions were the following: the child of a mother who read in Spanish and asked her questions in K'iché, replied mostly in Spanish; a child whose mother read in Spanish but used K'iché to give directions only spoke to repeat what was being read and, thus, talked in Spanish; three children whose parents talked to them in Spanish produced a few sentences in K'iché to describe what was happening in the pictures spontaneously.

Duration of the interaction. The average duration of the book-reading segment was 5:46 (5 min and 46 sec; SD = 2:40, range = 1:50 sec to 12:45). There was a marginally significant difference in the time spent on the book-sharing segment across the three groups of parental schooling level, $F(2, 27) = 0.70$, $p < 0.10$, such that on average parents with no schooling spent less time on the task than parents in the group of 1 to 3 years of education, but these did not differ from parents with 6 to 12 years.

Parents' utterances. The average total number of utterances produced by the parents during the book-sharing segment was 69.97 (SD = 35 utterances, range 21 to 143 utterances). There was a marginally significant difference in the average number of parents' utterances, $F(2, 27) = 3.58$, $p < 0.05$, such that, on average, parents with no schooling produced fewer utterances than parents in the group of 1 to 3 years of education, but these did not differ from parents with 6 to 12 years.

Parents' Book-Sharing Styles (RQ1)

Interactional style. Using proportions for the five variables of interactional role (i.e., reading, narrative provisions, narrative requests, conversational and non-narrative related), the Ward's analysis phase of the cluster analysis led to the identification of an

optimal number of five clusters. The Adjusted Rand Index for the final cluster solution, which I obtained using k-means iterative clustering, was 0.79, indicating the presence of five well-defined and homogenous clusters. These five clusters represent distinct book-sharing styles on the basis of the narrative role taken by the parents during the book-reading portion of the interaction. A visual representation of the five identified styles is offered in Figure 1.

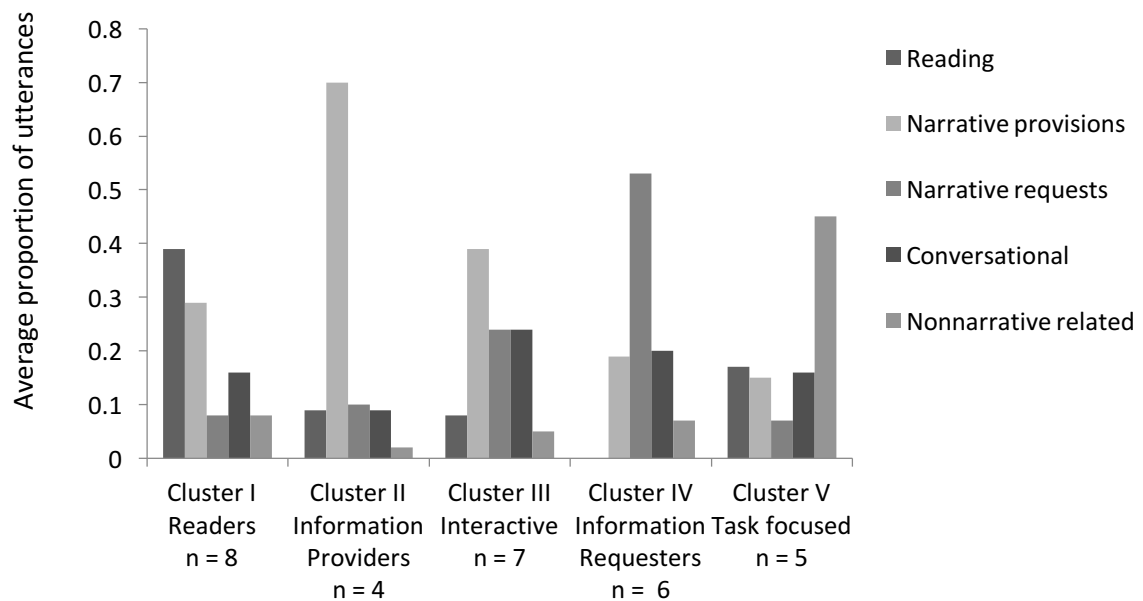


Figure 1 First cluster analysis: Five parental book-sharing styles as represented by their interactional style

Readers ($n = 8$). Almost a third (26.7%) of the total sample displayed the interactional style I call "Readers". Parents in this cluster primarily read from the text (39%) and provided narrative information (29%). They asked few child-directed questions (8%) and non-narrative related talk (9%), and used some utterances to maintain the flow of the conversation (16%). All parents in this group spent more time reading from the text than engaging in conversation with their children. With the exception of two mothers, all the others in this cluster read the entire book. One mother started reading

halfway through the book and read a total of 13 sentences out of the 34 sentences (roughly 40% of the book). Another mother read 2 sentences from the beginning and 5 sentences from the end of the book (roughly 20% of the book). While these two mothers differed from the rest of the parents in this group by not reading the entire book, both of them still spent more time reading from the book than engaging in extratextual conversation. Parents in this group spent more of the time during the interaction providing narrative information (either by reading from the text and providing narrative information) than fostering their children's participation through the use of questions (see Figure 1).

Information Providers (n = 4). This style was observed in 13.3% of the sample. Parents in this cluster participated in the interaction mainly by providing narrative information (70%). These parents also asked a few child-directed narrative questions (10%) and provided some conversational utterances to maintain the flow of the conversation (9%). They, nevertheless, differed from the parents who took the role of readers (i.e. the first cluster), by focusing less on reading from the text (9%) and producing fewer non-narrative related utterances (2%). This cluster also revealed a wider variability in how much text was read by the parents than in the reader group: one parent started reading at the beginning of the book and only skipped 2 of the 34 sentences in the book (reading roughly 94% of the book); one parent read 3 sentences at the beginning of the book and then stopped reading (roughly 9% of the book); one parent read 4 sentences from different places in the book (roughly 12% of the book); and one parent did not read any words. In spite of this variation, all of the parents in this group engaged in considerably more extratextual talk than straight reading from the text.

Interactive (n = 7). The third style was characteristic of 23.3% of the sample. Parents in this cluster were characterized by displaying a combination of provisions of narrative information (39%), child directed requests (24%), and conversational utterances (24%), thus engaging their children in the interaction. They spent little time talking about non-narrative related information (5%). This group also displayed a wide variation in how much parents read from the book. One parent read the entire book. One parent read some parts of the book and narrated others in her own words (in total she read 15 sentences corresponding to roughly 44% of the book). One parent read a total of 7 sentences from different places in the book (roughly 20% of the book). The majority of the parents (4 of 7) did not read any words from the book. Parents in this group spent more time engaging their children in conversation than reading from the text.

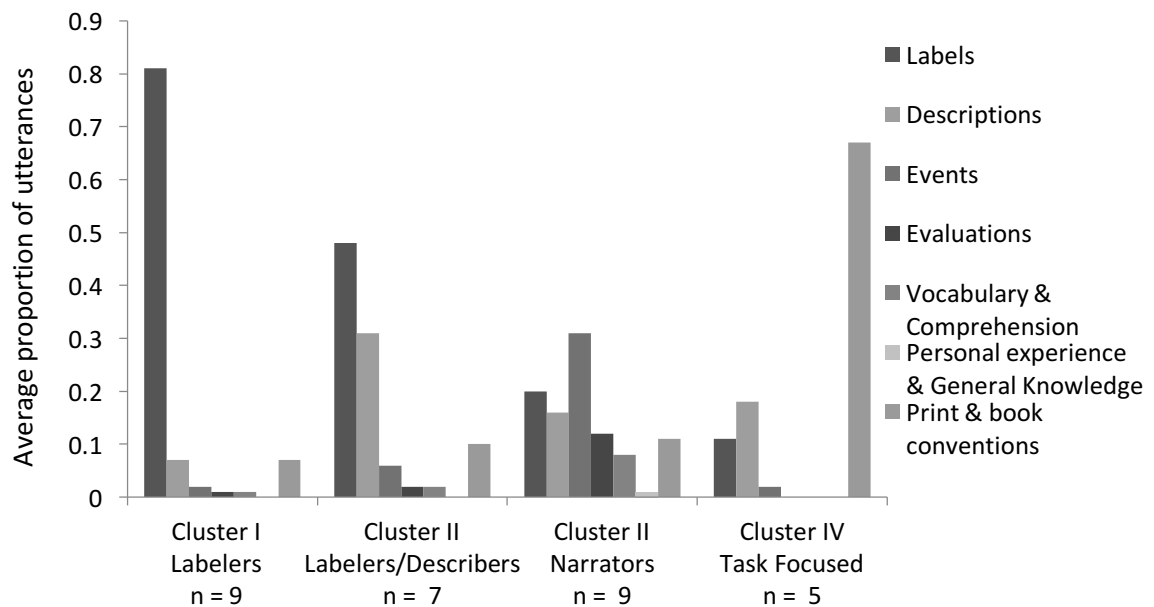
Information Requesters (n = 6). The fourth book-sharing style was observed in 20% of the sample. Most of the utterances of the parents in this group consisted of requests for narrative information from their children (53%). This group is the group that displayed the lowest proportion of reading as only one mother read two sentences from the book (less than 5% of the book). This group also displayed a lower proportion of narrative provisions than the parents from the interactive group (19% vs. 39%) and a higher proportion of non-narrative related talk (7% vs. 5%), but a similar proportion of conversational talk (20% vs. 24%). Thus, in contrast to interactive parents who both provided and requested narrative information from their children, parents in this cluster were more focused on obtaining than providing information.

Task-focused (n = 5). The fifth and final style was characteristic of 16.6% of the sample. This group consists of parents who spent most of their time engaged in non-

narrative related talk (42%), consisting mostly of print and reading conventions (i.e., talk about the code-based skills involved in reading and the process of sharing a book and/or learning to read). Parents in this group spent almost identical proportions of their time reading from the book (17%), providing narrative information (15%), and in conversational utterances intended to maintain the flow of the conversation (16%). Similarly to parents in the reader and information provider groups, parents in the task-focused group made few narrative requests to their children (7%). This group displayed a wide variation in the extent to which parents read from the book. One parent read the entire book; one parent started reading almost halfway through the book, for a total of 17 out of the 34 sentences (reading 50% of the book); one parent read a total of 6 out of the 34 sentences from different places (reading 18% of the book); one parent read one sentence (reading 3% of the book); and, one parent did not read any words from the book. These parents differed from the other groups in their emphasis on non-narrative related talk.

Content of parental talk. The second cluster analysis focused on the content of the parents' extratextual talk. Using the proportions for nine content variables (i.e., labels, descriptions, events, evaluations, checking for comprehension and vocabulary, personal experience, general knowledge, and print and reading conventions), the Ward's analysis led to the identification of an optimal number of four clusters. The adjusted Rand Index for the final solution obtained using k-means iterative clustering was 0.86 indicating four well-defined and homogenous clusters. These four clusters represent distinct groups in terms of the content in which the parents focused most of their extratextual talk.

The first group of parents, who I refer to as *labelers* ($n = 9$) spent most of their time (80%) making comments or asking questions intended to label the objects or characters in the pictures. The second group, *labelers/descriptors* ($n = 7$) also spent a considerable amount of time labeling (48%) and also devoted some of the time to descriptions of the pictures (31%). The third group, who I refer to as *narrators* ($n = 9$) also spent some time labeling (20%) and describing (16%). However, they differed from the other two groups in their attention to narrative aspects of the book by engaging in conversations about events (32%) and evaluations (12%). This group also produced some definitions of vocabulary (4%) and asked some comprehension questions (4%) intended to support the child to make-meaning of the story. The final group of parents, the *task-focused* group ($n = 5$), devoted the majority of their extratextual talk to print and reading conventions (67%), with some attention to labels (11%) and descriptions (18%).



Note: Vocabulary and comprehension, and personal experience and general knowledge were coded separately but merged in the graph due to their low frequency.

Figure 2 Second Cluster analysis: Four parent book-sharing styles as represented by the content of their talk.

Parental talk across narrative roles. As can be seen in Table 8, there are a few trends between parental interactional styles and the content of their extratextual talk, though there is not always an exact match between these two dimensions. Parents who adopted the requester style (i.e., spend their time requesting narrative information), focused their extratextual talk on labels (6 out of 6 parents). Parents who adopted a reader style (i.e., spent most of the time reading from the text rather than engaged in extratextual talk) focused more of their time talking about the events of the story rather than in other content (6 out of 8 parents). They also engaged in some talk about the characters' emotions and intentions, causality, and/or predictions of what would happen (i.e., *evaluations*), asked questions intended to check whether the children were following the story and provided explanations of Spanish vocabulary. These parents often interrupted the reading to explain sentences that they had just read to their children in their own words, calling in this way their children's attention to important aspects of the story. Finally, parents who adopted a task-focused style (i.e., spent most of the time discussing non-narrative related content) were engaged in talk about book and print conventions (5 out of 6). The parents in this group gave little attention to narrative content as their extratextual talk was mostly devoted to the logistics of sharing a book (e.g., making sense of the task) and/or on the process of learning to read, particularly letter recognition, pronunciation through recitation reading or sharing of educational expectations.

Table 8
Content of parental talk by parental interactional style

Clusters by content of parents' talk	Parents interactional styles					Total
	Reader	Information Provider	Interactive	Information Requester	Task- focused	
Labelers		1	2	6		9
Labelers/Describers	2	2	3			7
Narrators	6	1	2			9
Print-focused					5	5
Total	8	4	7	6	5	

There were, however, notable exceptions to these trends. Two of the parents in the reader group did not focus on the events of the story as the rest of the group. These two parents spent most of their time focusing on labels and descriptions. On the other hand, three parents who did not adopt the role of readers (one information provider and two interactive parents) also focused on the events of the story and engaged in evaluative talk, differing in this way from the parents in their respective groups who were mostly focused on labels and descriptions. Interestingly, one of these mothers did not read any words from the book.

Parents' Book-Sharing Styles and Parental Schooling Level (RQ2)

The second aim of this study was to explore whether book-sharing styles varied across groups of parents with different schooling levels. Analyses were conducted along the two dimensions of narrative role and content of parental talk. Each is presented separately.

Relation between parents' schooling and interactional styles. As can be seen in Table 9, the two most evident trends between the parents' schooling level and parents' interactional styles are: 1) none of the parents with 1 to 3 years of school took the role of

the provider; and 2) none of the parents with 6 to 12 years of schooling took the role of information requester. In general, parents who did not attend school showed a preference for styles in which they involved the child through the use of questions (i.e., the interactive and information requester styles). Parents who had attended school were more likely to adopt the role of readers than other roles. Nevertheless, parents with more years of schooling were not more likely adopt this role, than parents with a few years of schooling –roughly a half of the parents from the group with 1 to 3 years of schooling (4 out of 10) and a third of the parents with 6 to 12 years of schooling (3 of 8) adopted this role. Notably, one mother who had not attended school took the role of reader.

Table 9

Distribution of parents by interactive role and parental schooling level

Parental interactive role	Parental schooling level (years)			Total
	0	1 – 3	6 – 12	
Reader	1	4	3	8
Information Provider	2		2	4
Interactive	3	1	2	6
Information Requester	5	1		6
Task- Focused	1	4	1	6
Total	12	10	8	30

Relation between parents' schooling and content of parental talk. As can be seen in Table 10, parents with no schooling were more likely to focus their extratextual talk on labels and descriptions than parents who had attended school. Two thirds of the parents who had not attended school (9 of 12) spent most of the interaction engaged in talk about labels (6 parents) or about labels and descriptions (3 parents). In contrast, roughly a third (3 of 10) of the parents with 1 to 3 years of education and half of the parents with six years of education (4 of 8) focused their talk on labels and on labels and descriptions. Parents who had attended school were more likely to focus on the events of

the story and engage in some evaluative talk than parents who had not attended school. Roughly a third of the parents who had attended school (7 of 18) emphasized this content in comparison to only a sixth of the parents with no schooling (2 of 12). Again, parents with more years of schooling were not more likely to emphasize this content than parents with fewer years of schooling (3 of 8 parents with more than 6 years of schooling in comparison to 4 of 10 parents with 1 to 3 years of schooling).

Table 10

Distribution of parents by content of parental talk and parental schooling level

Content of parental talk	Parental schooling level (years)			Total
	0	1 – 3	6 – 12	
Labels	6	2	1	9
Labels and Descriptions	3	1	3	7
Events and Evaluations	2	4	3	9
Print and Reading Conventions	1	3	1	5
Total	12	10	8	30

Qualitative differences in the use of questions between schooled and unschooled parents. A closer look at the ways in which the information requester and interactive parents asked questions to their children revealed two different approaches. In the first approach, the mothers appeared to have the intent of testing their children's knowledge. In the second they seemed to be using questions to make sense of the book themselves.

The first approach was observed in seven mothers (four of whom had attended school). The interactions displayed three mothers who had attended school resembled the Initiation-Response-Evaluation discourse pattern characteristic of Western classrooms.

See for example this exchange between Juanita⁹, a mother with a sixth grade education, and her child:

*MOT: and what is this?
*CHI: lion.
*MOT: a lion.
[the mother's intonation conveys that she is confirming the answer]
*MOT: and what is the lion doing?
*CHI: he is looking at the book.
*MOT: he is looking at the book.
[the mother's intonation conveys that she is confirming the answer]
(Juanita, mother and son)

Three mothers who did not attend school also conveyed the intent of testing their child's knowledge in the way in which they asked questions. Nevertheless, they did not always provide a verbal evaluation of their answers or the right answer when the child did not know it. See for example this excerpt between Carla, a mother who did not attend school, and her child:

*MOT: and this?
*CHI: I see that it's a pig.
[The mother does not look at the child, she attempts to turn the page but then stops touching the drawing of the zebra]
*MOT: and this?
*CHI: I don't know what it is
[The child smiles and nods her head saying she does not know and glances at her mother. The mother does not look at the child and turns the page]
*MOT: and this?
[The mother's asks the question without pointing at any drawing specifically]
*CHI: a squirrel and a zebra.
[The child smiles and looks at her mother. The mother does not look at her and turns the page]
(Carla, mother and daughter)

In contrast to these six interactive and requester mothers who focused on labels and descriptions, Cecilia, an interactive mother with a third-grade education, used known-answer questions to support her child in retelling the events of the story:

⁹ All names of parents are pseudonyms. Translations to English were done by the authors from transcripts in Spanish. These are available from the author on request.

*MOT: [Reading:] <Miss Pig looked at him with fright, what a horror she cried, what a horrible, if you do not see [: go] immediately I will call Mr Pig and he will take care of you>.

*MOT: did you understand what it said?

[The mother's intonation conveys that she did understand and she is testing her child's understanding]

*CHI: yes.

*MOT: what does it say?

*CHI: she screamed it says.

*MOT: and why?

*CHI: she was scared of him.

*MOT: and why was she scared of him?

*CHI: it is because he was wearing something of the cebra, something of the fox and something of the lion.

(Cecilia, mother and son)

In spite of the differences in the emphasis on content (i.e., labels and descriptions vs. comprehension of the events in the story), these seven mothers asked questions known-answer questions with the intent of testing their children's knowledge.

The second approach, to asking questions was displayed by five mothers who had not attended school. These mothers did not appear to be testing their children's knowledge but rather trying to make sense of the book themselves. Three types of evidence suggested this. First, the intonation and the way in which these mothers phrased their questions suggested that these mothers did not necessarily know the answers themselves. Rather than asking "¿qué es?" [what is this?], these mothers would often phrase their questions in the form "¿qué sera?" [what will it be?] or "¿será qué es ____?" [could it be a ____?]. See for example this exchange in which Pascuala and her child examine the book together:

*MOT: is this an owl?

[The mother's intonation conveys a dubious tone as if she is not sure]

*CHI: yes.

[The child points at the drawing and both of them look intently at the book in silence]

*CHI: this is a squirrel.

[The child points at a drawing]

*MOT: what may this be?

[The mothers points at another drawing and her intonation conveys a dubious tone as she herself is wondering]

*CHI: it's a l, it's a rabbit!

*MOT: oh yes.

[The mother turns her attention to continue examining the other drawings on the following page while the child continues to explain]

*CHI: squirrel we called it a while ago and it is a rabbit

(Pascuala, mother and son)

Second, after asking a question the mothers wanted to confirm their children's answer as if they were not sure themselves. See for example, this exchange between Fermina, a mother who only attended a few weeks of the first grade and her child:

*MOT: could this be a pig?

[The mother looks intently at the book, her intonation conveys that she is wondering about the answer herself]

*CHI: pig.

[The child points at the words as she says this, the mother continues looking at the book intently until she turns the page]

*MOT: now this one?

[The mother's intonation once more suggests she is wondering about the answer herself]

*CHI: a dog.

[The child points at the drawing]

*MOT: could it be a dog?

[The mothers' intonation conveys she is not completely sure of the answer provided]

*CHI: yes.

(Fermina, mother and daughter)

Third, on some occasions in which the children explicitly said that they did not know the answer to their mothers' questions, the mothers did not seem to know the answer either. In the next exchange Pascuala wonders about the name of an animal. Her son says he does not know what it is. Instead of providing an answer, Pascuala states that the name must be in the text. When her son realizes that it's a pig she agrees with him:

*MOT: what may this be?

[The mother's intonation conveys a dubious tone as if she is herself wondering what it is].

*CHI: how pretty!

*CHI: but I don't know what it is.

*MOT: you don't know what it is?

[The mother's tone does not convey that she is surprised that he does not know the answer]

*MOT: it must be written here.

[The mother points at the text in the page as she says this]

*CHI: it's a pig!

*MOT: it's true!

(Pascuala, mother and son)

Notably, in this group of mothers who appeared to be asking questions to make sense of the book one mother was focused on making sense of the events of the story. Even though Jessica was not able to read, she and her child used the drawings to infer the events of the story connecting them into a coherent plot. Jessica's phrasing of the questions and her participation in the exchange, suggested that she did not know the answers to the questions that she was asking. See for example the following example:

*CHI: and this one look what happened to him, they +/-.

*MOT: and why?

[The mother's intonation conveys a curious tone as if she does not know the answer herself]

*MOT: now are they going to take the tail of this one?

[the mother's intonation conveys a curious tone as if she is hypothesizing what will happen instead of trying to test her child's knowledge of something she knows]

*CHI: they are going to take it and put it on him.

*MOT: yes, right?

*CHI: aha.

*MOT: they are going to put it on him +/-.

*MOT: no, he is going to put it.

[the mother's tone suggests that she is correcting herself]

*CHI: ah, yes.

[The child's intonation suggests that she agrees with her mother]

(Jessica, mother and daughter)

Thus, while this mother was not able to read, she and her child were able to use the pictures to focus on the events of the story. Notably, this mother was also one of the three parents in the whole sample who was engaged in some prediction of what would happen, and one of the few parents who referred to the character's intentions and state of mind.

It is impossible to know for certain whether this group of mothers actually knew the answers to the questions that they were asking or whether their questions were genuine. Nevertheless, from the phrasing of their questions and the ways in which they responded to their children's answers, it seemed that rather than attempting to "teach" or "test" their children these mothers who had not attended school were attempting to make sense of the book with them.

Discussion

This study contributes to the growing knowledge base regarding literacy practices of non-middle class communities by examining the book-sharing styles amongst rural Mayan K'iché- speaking parents and their first grade children in communities undergoing economic and educational change. The use of cluster analysis allowed a systematic examination of within-group variation in parental book-sharing styles in a population often assumed to be highly homogeneous. Even in this small sample there was considerable variability in the book-sharing styles along the two analytical dimensions of interactional role and content of parental talk, as well as observable relations between these the two analytic dimensions and parental schooling, albeit with some remarkable exceptions. These results call for a consideration of other influences in parent-child book-sharing interactions beyond parental schooling and challenge previous explanations that

seek to explain the storybuilder style as characteristic of “child-centered” societies and the storyteller style as characteristic of “situation centered” societies. .

Variability in Parental Book-Sharing Styles

Participants in this study displayed a wide variability in the role they adopted during the book-sharing interaction with their children and in the content they emphasized in their extratextual talk. In general, parents can be divided in two groups: one which emphasized narrative content (i.e., readers, information providers, interactive and information requesters) and one which emphasized non-narrative content (i.e., task-focused parents).

Four of the styles elucidated by this study resembled styles found in previous studies with middle class Peruvian and European American mothers (Melzi & Caspe, 2005; Melzi et al., 2011) and with low-income first generation Latino mothers in the United States (Caspe, 2009). The reader and information provider groups are similar to the “storyteller” style identified by Melzi & Caspe (2005), Melzi et al. (2011) and Caspe (2009), in that the parents spent more of the time during the interaction providing narrative information (either by reading from the text or providing narrative information through comments) than fostering their children’s participation through the use of questions. However, the analysis of parental talk revealed that not all of the parents in these two groups focused on the events of the story (i.e., some focused on labels and descriptions). I thus refrained from using a label which may suggest an emphasis on the story. Both the reader and information provider groups included parents who spoke in Spanish and parents who spoke in K’iché during the interaction.

Similarly, the interactive and requester styles resembled the “storybuilder” style found by Melzi and Caspe (2005) and Melzi et al. (2011), in that parents devoted some of their time to asking questions that fostered their children’s participation in the narrative interaction. Yet again, the analysis revealed that the majority of the mothers in these two groups did not focus on the events of the story. Caspe’s (2009) identification of a “storybuilder-labeler” style better captures the approach taken by the majority of the mothers in this group both in terms of interactional style and content of parental talk; nevertheless, since there was one notable exception of a mother who involved her child in co-narrating a story, I also refrained from using this label. The interactive group was comprised of parents who spoke in Spanish and parents who spoke in K’iché during the interaction. The information requester group was mostly comprised on mother who spoke in K’iché (5 out of 6).

Parents in this study did not show a marked preference for either of these two narrative book-sharing styles. The same number of participants displayed styles in which the parent took the role of the main narrator (i.e. readers and information providers), and styles in which the parent shared the role with the child by engaging him or her through the use of questions (i.e., interactive and requesters). These findings stand in contrast to those of previous studies which documented a preference for one of these ways of interacting with children amongst parents from the same cultural group (i.e., Caspe, 2009; Melzi et al., 2011).

This study also differs from these three studies (Caspe, 2009; Melzi & Caspe, 2005; Melzi et al., 2011), in the identification of a task-focused group characterized by an emphasis on non-narrative information. The task-focused style included three

approaches to the task: parents who were focused on providing and requesting information on letter recognition; parents who carried out recitation reading; and parents who themselves were trying to make-sense of the task. Parents who focused on letter recognition and recitation reading spoke in Spanish during most of the interaction. Parents who were trying to make sense of the task spoke mostly in K'iché.

The emphasis on letter recognition resembles the typical interaction reported by Gallimore and Goldenberg (1993) amongst first-generation Mexican immigrants in Los Angeles, in which parents engaged their children in the interaction by asking them to recognize letters, words and phrases. In Gallimore and Goldenberg's (1993) sample, this was a wide spread approach to sharing a book. The authors argued that these may have been related to the parents' own experiences in school. This style was not as prevalent in this sample. This can be partly explained because more than a third of the participants (12 of 30) were not able to decode themselves. It may also be explained by the child's emerging letter recognition skills. Indeed, some parents did attempt this approach by asking their children to identify some letters at the beginning of the interaction, but changed their approach after their children were unable to answer these questions. It would be interesting to examine if this style becomes more prevalent as children develop more sophisticated letter-word recognition skills.

The second approach within the task-focused style, recitation reading, has also been documented in previous studies. De Temple and Tabors (1994) documented that 3% of a sample of young welfare-recipient mothers in the United States engaged their children by asking them to repeat what they read verbatim. This approach was also identified as one of the styles used in Tongan and Maori in New Zealand families

(McNaughton, Ka'ai & Wolfgramm, 1993). Two of the mothers in this sample (6.7%) engaged in this type of interaction for a considerable portion of the interaction, focusing on the correct pronunciation of the words rather than the events of the story as parents in the reader group.

The third and final approach within the task-focused style, which I refer to as “making sense of the task”, has not been documented in any other population. In this approach the mothers tried to make sense of the task of sharing a book with their children. During the interaction the two mothers who displayed this interactional style spent most of their time commenting on their lack of reading skills, expressing uncertainty on what they were supposed to do with the book, and asking their children to tell them what they did with books when they went to school or when they looked at books with other family members. The main role of the mothers who displayed this style was asking the child to explain this unfamiliar task. Rather than leading the interaction, these two mothers appeared to be inviting their child to take the lead. This behavior may be related to the mothers’ limited experiences with books due to their low levels of schooling. In the next section I discuss the observed patterns between book-sharing styles and parental schooling levels.

The Influence of Schooling

The second aim of this study was to explore whether Mayan parents’ book-sharing styles varied across groups of parents with different schooling levels. Unschooling parents showed a preference for styles that engaged children through the use of questions and were more likely to emphasize labels and descriptions than parents with schooling. In contrast, schooled parents were more likely to take the role of readers and to emphasize

content intended to make meaning of the story (i.e., events, evaluations, comprehension questions and definitions of vocabulary). Thus, interestingly, schooled parents focused on meaning-making to a larger degree, yet offered fewer opportunities for their children to participate in story building. On the other hand, unschooled parents focused on more basic aspects, i.e., labels and description, but engaged their children much more actively in the interaction.

In spite of this general pattern, there were differences in the ways in which schooled and unschooled parents from the Information Requester and Interactive groups asked questions that are worthy of further discussion. In addition there were some notable exceptions to the described pattern between schooled and unschooled parents. Both of these results call for the consideration of factors beyond parental schooling in influencing parents' book-sharing styles.

Difference in the use of questions between schooled and unschooled parents within the Requester/Interactive styles. I found differences in how parents asked questions within the interactive and information requester styles. In total, 12 out of 30 parents –four mothers who had attended school and eight mothers who had not attended school– spent a considerable portion of the interaction asking questions. There were differences in the phrasing of questions and response to children's answers between schooled and non-schooled mothers.

Much of the interactions between three of the schooled mothers and their children resembled the Initiation-Response-Evaluation (I-R-E, Mehan, 1979) discourse pattern that is prevalent in Western schools. These mothers asked a question of their children and responded to their child's answer either by confirming their answer or by providing the

right answer. These results are consistent with Chavajay's (2006) findings of the ways in which schooled mothers structured a problem solving discussion with their children, as well as with Rogoff et al.'s (1993) findings of a higher use of praise amongst schooled mothers than amongst unschooled mothers when interacting with their toddlers. Levine and colleagues (2012) found that mothers who are socialized into the discursive practices of school enact them later in their lives taking the role of students when interacting with professionals such as doctors, and the role of teachers when interacting with their children. Participants in this study whose interaction resembled the I-R-E discourse patterns can thus be considered as taking a teacher-like role with their children.

Contrary to what was expected, three mothers who had not attended school also appeared to be using questions with the intent of verifying knowledge. However, their responses to their children's answers were qualitatively different than those of mothers who had attended school. These mothers did not provide a verbal confirmation when their child answered their question, nor provided an answer when the child did not answer their questions or claimed not knowing the answer. This lack of verbal response to their children's answers is consistent with an intent participation approach to socialization in which adults seldom offer verbal feedback or praise as children complete a task (Rogoff, 2003; Rogoff, et al., 1993). It is plausible that in spite of not having attended school, these mothers had the opportunity to observe other schooled adults and/or older children interact with books with young children and integrated the practice of asking questions, yet continued to provide feedback in non-verbal ways which were not captured by the methodology used in this study. Rogoff and colleagues (1993) noted that while schooled mothers integrated some "child-centered" strategies such as the use of verbal explanation

and praise, they maintained some of the traditional socialization practices, for example, being ready to provide physical help to a struggling child. It is also plausible that these mothers did not provide feedback to the questions because they did not know the answer themselves, and thus these questions might indeed be authentic questions. Future studies should explore both of these possibilities by using approaches that allow distinguishing questions with the intent of verifying knowledge from authentic questions (see section on implications and future steps).

In spite of these surprising results, and more in line with previous research with unschooled Mayan mothers, five of the parents who did not attend school seemed to be asking authentic questions and engaging in a genuine co-construction with their children. Mayan mothers who had not attended school have been shown to prefer egalitarian over hierarchical forms of engagement in tasks such as exploring a toy, building a puzzle and participating in a problem-solving discussion with children (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993). The present study extends these findings to a book-sharing context, by providing evidence that some of the unschooled mothers were engaged in collaborative interactions in which they appeared tried to be trying to make sense of the book with their children, rather than teach them or test their knowledge. However, results reveal that some unschooled mothers may also show preference for more hierarchical ways of interaction, even if they do not fully resemble typical teacher-student interactions. Future studies should consider other parental' characteristics and experiences besides the years they spent in school to understand what differentiated the two groups of unschooled mothers that displayed such different approaches to asking questions.

Notable exceptions to observed pattern between narrative styles and parental schooling. While the majority of unschooled mothers focused on labeling and descriptions, there were two notable exceptions to this pattern. Two of the mothers who had not attended school produced talk which resembled that of parents who had more schooling by focusing on the events of the story and making inferences about the characters' mental states and intentions. Rosario spent most of the time reading from the book than engaged in extratextual conversation. This mother learned to read through her work selling arts and crafts in the town of her municipality. Even though she stated that she could "only read a few letters", she displayed better literacy skills during the task than some of the parents who had attended school for three years. Jessica used the pictures to infer the narrative events in which she also focused most of her conversation with her child. This mother reported that her husband often read stories from the Bible and from other illustrated books to her and her two children. When he was not around to read to them, she looked at these books and magazines with her children. These two cases provide further evidence to show that parents' out-of-school experiences with literacy can also be an important factor in shaping book-sharing interactions. These are encouraging examples of how the introduction of a book might elicit engaged and interesting conversations about topics beyond the here-and-now which are important for supporting students' language and literacy development. By being free from the overemphasis on basic code-based skills on code-based skills, Jessica was able to engage her child precisely in the more challenging meaning-making discussions that are so critical to prepare students for literacy. Learning from exceptional cases such as Jessica's is a promising, yet underexplored path for intervention research to promote culturally

relevant practices that build from the behaviors of caring, committed and language/literacy savvy unschooled parents.

There were also exceptions to the observed trends between book-sharing styles and parental schooling amongst parents who had attended school. While parents who attended school were more likely to take the role of readers, not every schooled parent read from the book or engaged in talk about the meaning of the story. One mother with a third-grade education did not read any words, and three mothers with 1 to 3 years of education and three of the parents with 6 years of education only read a few sentences. In terms of content, more than a third of the parents with schooling (7 of 18) focused most of their extratextual talk on labels or labels and descriptions.

There was a more evident pattern between how much the parents read from the book and their focus on the story, than between the years that the parents spent in school and parents' talk that focused on the story. Almost all of the parents who read most of the book engaged in talk intended to make meaning of the story such as explanations of the events of the story, talk about the characters' internal states, and in some cases predictions of what would happen next. Previous studies have found that mothers with higher literacy skills were more likely to make more comments about the characters' psychological states, predictions and explanations of the events in the story than mothers with lower literacy skills (Curenton et al., 2008; De Temple & Tabor, 1994). The results of this study signal that this may also be the case in this sample. However, given that this study did not include a measure of parents' reading skills it is impossible to know whether the parents who chose not to read had lower literacy skills, or if they simply decided not to read.

In addition to these exceptions, it is also important to note that there were no marked differences in the preferred book-sharing style between parents who had attended school for 1 to 3 years and parent who had attended school for 6 to 12 years. Parents with more years of schooling were not more likely to take the role of readers or to engage in talk about the meaning of the story than parents with fewer years of schooling. The approaches taken by parents from the two groups both in terms of interactional style and content were practically indistinguishable from each other. Furthermore, three of the parents who displayed the highest proportions of utterances intended to support their child's comprehension of the story (i.e., comprehension questions and definitions of vocabulary) were parents from the group with 1 to 3 years of schooling. Gorman and Pollit (1997) found that literacy skills were not necessarily related to years of schooling in rural Guatemala, as literacy skills continued to improve after children left school. It thus appears that there may be more significant differences in book-sharing styles between parents who attended school and those who did not attend, than between parents with more or fewer years of schooling.

Challenging Previous Interpretations of Book-sharing Styles as Dependent on Child- and Situation-Centered Approaches to Children's Socialization

Taken together, the results of this study challenge previous interpretations which have equated a story builder style with a "child-centered" approach and a story teller style with a "situation-centered" or "intent participation" approach to children's socialization (Casper, 2009; Melzi, 20011). According to these interpretations, middle-class European American parents prefer to co-construct a narrative with their children due to their "child centered" socialization approach in which children are treated as equal conversational

partners (Melzi, et al., 2011). On the other hand, middle-class Peruvian and low-income Latino mothers prefer a style that draws a clear distinction between narrator and audience due to a “situation-centered” or intent participation approach to children’s socialization (Casper, 2009; Melzi et al., 2011). The results of this study challenge the equivalences drawn in the discussion of previous results in three ways.

First, this study provides evidence to show that the use of questions does not necessarily imply the co-construction of a narrative by two equal conversational partners. The interactive mothers with schooling experience focused most of their talk on labels and descriptions and were engaged in interactions that resembled the hierarchical Initiation-Response-Evaluation discourse pattern that is prevalent in schools (Mehan, 1979). While this type of interaction can be considered child-centered given that the adults’ child-directed speech has the clear intent of instructing children, in this sample this style of interaction was not intended to build a narrative together as most parents were not focused on the events of the story. On the contrary, it seemed that parents were more focused on testing the child’s knowledge of labels. Thus, this study calls for caution in over-generalizing parents’ use of questions to signal a co-construction of a narrative between equal conversational partners.

Second, this study shows that parents from communities with traditional “situation-centered” socialization practices may also treat their child as equal conversational partners during a book-sharing interaction. Five of the interactive/requester mothers who had not attended school displayed a way of asking questions that suggested a genuine and collaborative effort to make sense of the book with their children. These results are consistent with previous observations of egalitarian

forms of engagement amongst unschooled Mayan parents and their children (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993). The results of this study thus show that parents from situation-centered societies may also engage their children in conversations as equal conversational partners during book-sharing conversations, even if their intent is not to teach children as is common amongst European American middle class mothers. Mayan parents' descriptions of their interactions with their children around reading materials not connected to school, such as Bibles and newspapers, also suggest that the extent to which parents engage their children in a teacher-like (i.e., hierarchical) or a more egalitarian/collaborative manner may also vary *within* individuals depending on the setting and the perceived intent of the activity (Nieto, 2016). For example, some schooled parents reported interacting around news papers with their children before the child started attending school as an entertaining activity. However, as children entered school these spontaneous activities were displaced by teacher-like interactions around homework and primers bought for school. In line with this, the dichotomous distinction between "child-centered" and "situation-centered" approaches may need to be conceptualized as a continuum rather than a binary, particularly in communities in which there is evidence of significant generational shifts in parents' beliefs and practices as the communities become better connected with the mainstream society. Future studies should include other types of reading materials not connected to school which may elicit different interactions between parents and children.

Last but not least, the equivalences drawn between the interactional styles in which the parents take the role of the sole narrators (i.e., storytellers in previous studies, and readers and information providers in this study) with a "situation centered" approach

must be taken with caution due to the place of oral language in the interaction. As previously mentioned, the terms “situation-centered” or “intent participation” referred to observation and participation interactions in which oral language was not relied upon as a distinguishing feature of the concept. The use of this concept to explain book-sharing styles that are highly verbal in nature thus call for caution. Furthermore, some of the participating mothers who took on a role similar to the “storybuilder” displayed some behaviors that have been previously categorized as characteristic of a “situation centered” approach to socialization, like for example a lack of reliance on oral feedback or praise. Future studies should examine the extent to which these mothers might have been communicating with their children through a closer examination of their nonverbal behavior.

Implications for Practice

This study elucidated a wide variability in Mayan parents’ book-sharing styles. These results call for a consideration of the potential of promoting different book sharing styles, and caution against approaches that seek to promote one book-sharing style over all others.

Family literacy interventions could support parents by providing them with different options that respond to their children’s language and literacy skills and that are well-aligned with the ways of interaction that feel most comfortable to them. Parents could benefit from knowing information about the benefits of labeling for the development of vocabulary for children who have lower vocabulary skills and the benefits of styles that are focused on interpreting the meaning of the story for skills such as story comprehension, definitions and emergent literacy (e.g., Curenton, Craig &

Flanigan, 2008; De Temple & Tabors, 1994; Haden et al., 1996; Reese et al., 2003).

These two approaches may be complementary with labels serving the ultimate goal of engaging the child in making meaning of the story. Programs could take advantage from the skill to learn through careful observation in Mayan communities by engaging parents in observing and analyzing videos of other parents who have a similar interactional style but engage in different types of talk. For example, Juanita, an interactive mother who focused on labels and descriptions but whose child displayed interest in discussing the events in the story, might have benefited from observing the style taken by Cecilia, who also used questions but focused on the meaning of the story. Parents could be recruited as allies in disseminating information and modeling book-sharing styles in their own or similar communities.

Programs working with this population should also seek to expand the parents' understanding of what they can do with a book. This study found wide variation in the ways in which mothers who were not able to read participated in a book-sharing interaction with their first grade children. Two of the task-focused mothers spent most of the time trying to make sense of what they were supposed to do and/or making comments about their lack of literacy abilities. However, many other mothers who did not read from the book took the opportunity to engage in collaborative interactions with their children. As mentioned before, a descriptive approach to book reading may be appropriate for children who are developing their vocabulary. However, mothers who are not able to read can also support their children's narrative abilities and use of non-immediate language by creating stories using the pictures to co-construct a coherent narrative, discuss the characters' mental states, and even make predictions. Examples like Jessica's can be

explicitly shared and analyzed collaboratively with mothers with low (and high) literacy skills breaking assumptions that the only way to interact with a book is by reading it and opening a new possible way of sharing a story-book with their children. By valuing these parents' skills in supporting their children's literacy development, programs can empower unschooled parents.

Interventions can also benefit from expanding the types of interactions through which parents can support literacy development. The results of this study suggest that even parents with low literacy skills can have rich interactions around a storybook. Nevertheless, other studies have shown that the use of elaborative strategies, as asking children to provide more information and evaluations (i.e., mental states and judgments) in conversations about the past can promote children's narrative skills, concepts about print and story comprehension both in middle class and low-income populations (e.g., Leyva & Smith, 2016; McCabe & Peterson, 1991; Reese, 1995; Reese et al., 2010). Parents may thus benefit from knowing that interactions which are not necessarily focused on either reading of a text or on the mechanics of reading (i.e., letter identification, word reading) can also support their children literacy development.

Limitations and future directions

This study comprises a first attempt to characterize the different book-sharing styles which may be adopted by Mayan parents as they share a book with their children. The limitations of this study guide the way for further research.

The small sample size and issues of self-selection call for caution in generalizing these results to a larger population. The number of eligible parents in the four participating communities was limited by their potential participation in the ongoing

intervention. Eligible parents were those of first-born children or children who were three or more years younger than their older siblings. Future studies that do not take place within the context of a literacy intervention should be able to include the full population of first-grade families. Issues of self-selection also pose some limitations to the generalizability of the findings. It is certainly possible that parents who decided to participate in this study are those who have a greater interest in being engaged in academic-supporting activities with their children; however, the process of recruitment signaled that lack of time, personal confidence, and trust in the research process were the main deterrents for participation. Most of the eligible parents who chose to not participate talked about their lack of time to do so. As one of the mothers explained, every hour that she spent in the study meant a loss of resources for her child. Issues of personal confidence and trust in the research process may also play a role in parents' self-selection. One of the mothers openly shared feeling unsure on whether she was raising her child adequately. In line with this, she was more interested in gaining our advice as to how to improve her parenting skills than in merely sharing her experience. It is thus likely that the parents who decided to participate in this study were the parents with more availability of time and confidence in their abilities to engage in academically-supporting activities. Future studies could include more parents by financially compensating them for their time and using designs that provide participants with opportunities to learn through their participation, such as action research.

The data gathering method itself may have an effect on parent-child interactions. Parents were instructed to share the book as they normally would with their children and the dyads were left alone for the duration of the interaction. Nevertheless, the presence of

a video camera and the research context may have influenced the parents' behavior eliciting a tendency to display socially desirable behavior. This tendency does not seem to have restricted systematic variance substantially, as there were remarkably different interaction patterns across the sample. Still, there is a need for more ethnographic work on parent-child interactions around storybooks and other literacy materials which are available in this context, such as religious materials and newspapers.

This study is also limited in its analytical approach. The use of transcripts and a coding scheme based on verbal utterances did not capture nonverbal ways of communication. Given the centrality of nonverbal communication in an intent participation approach to children's socialization that is characteristic of Mayan communities (Rogoff, 1990, 2003), future studies should make use of the videos and coding schemes which allow capturing nonverbal ways of communicating.

This study is also limited in its lack of parental measures to test two of its central emergent hypotheses. The first emergent hypothesis concerned differences in the way mothers ask questions to their children. Specifically, I hypothesized that some mothers asked questions to which they knew the answer, while others asked questions for which they did not know the answer (i.e., more genuine questions as they themselves struggled with the task and the story). The methodology used in this study did not allow for the discrimination between parents' questions for us to determine whether the parents knew or did not know the answers. In order to explore this issue, future studies could include a follow-up interview in which the mothers watch the video with the researcher and comment on the thoughts and intentions they had when they asked different questions to their children. Second, this study suggests that the use of extratextual talk which is not

focused on the pictures may be more directly related to parents' literacy skills rather than the amount of time they spent in the institution of Western schooling (Curenton et al., 2008; De Temple & Tabors, 1994). Future studies should include an adequate measure of parents' literacy skills that allow testing the relation between literacy skills, parental schooling, and content of parents' talk during the interaction.

Finally, this study is limited in the lack of examination of possible relations between the identified book-sharing styles and the quantity/quality of children's participation in the task. A fundamental next step in this research is examining whether the identified styles have an influence on the extent to which children participate (e.g., are their contributions elicited by their parents' or spontaneous?) and the content of their extratextual talk (e.g., do they focus on the same content as their parents?). Future studies should use methodologies that allow the examination of how parents' and children's contributions affect one another, as well as whether parents and child contributions occurred at the same level of cognitive demand. Sequential analysis (Bakeman & Quera, 2011) allows capturing the reciprocal, dynamic nature of parents' and children's interactions while sharing a book, and examining parent-to-child and child-to-parent effects (e.g., Luo & Tamis-LeMonda, in press). Future studies could examine the same data using this method.

Conclusion

In spite of these limitations this study contributes to our knowledge of literacy practices in non-mainstream communities by elucidating considerable variability in the ways in which rural Mayan parents interact with their children around a book. This study provides additional evidence of book-sharing styles that have been previously found in

similar studies with other populations and expands the range of possible book-sharing styles so far reported in the literature by characterizing parental interactional styles around a book with text in communities in which the traditional socialization pattern is not reliant on verbal communication and in which not all parents have necessarily had extensive experience with books.

IV. General Discussion

This dissertation makes a contribution to the knowledge base on parent-child relations in Mayan communities, provides further evidence in support of Human Development and Social Change Theory, and highlights the role of parental experiences beyond their participation in Western schooling as important sources of social change. This study examined both schooled and unschooled parents' beliefs and practices in four rural Mayan communities undergoing social change. According to Human Development and Cultural Change Theory as communities move from relatively self-contained systems based on subsistence economies, towards systems that are better connected and more reliant on cash-based economies, there will be changes at the levels of cultural values, learning environments and human development trajectories (Greenfield, 2009). The adaptations that parents make, and in particular the commitments that they make towards formal education, play a central role in shifts in children's learning environments at times of social change (Greenfield, 2009; Levine & White, 1986). These adaptations will be shaped by the cultural models of parenthood in different societies (LeVine & White, 1986). In addition, at times of rapid social change traditional institutions and value systems will coexist with new ones (Greenfield, 2009; also see Fong, 2007 and Keller, 2007).

This study contributes to this growing field by providing an account of both change and continuity in parental beliefs and commitments to support their children's school-related learning in four Mayan communities that are moving from subsistence to cash-based economies and becoming increasingly connected to the outside world.

Mayan communities were the focus of influential research in child development during the 1980s and 1990s (e.g., Gaskins, 1996, 1999; Rogoff, 1990, 2003). At the time the villages were relatively disconnected from other communities and largely dependent on subsistence agriculture. Given that the household functioned as the basic economic unit, children were socialized to work within their own families, few children attended school and parents' reportedly questioned the benefits of schooling for agricultural occupations (Gaskins, 1996; Rogoff, Correa-Chávez, & Navichoch Cotuc, 2005). Since the time in which Rogoff's and Gaskin's studies were conducted Mayan communities have undergone significant sociodemographic changes moving from dependence on subsistence agriculture to a cash-based economy and from being relatively isolated to being increasingly connected to the outside world (Joy, Lipke, & McKay, 1992; Rogoff et al., 2005). The institution of Western schooling has also become much more prevalent in many children's daily lives (Rogoff et al., 2005).

Previous studies have documented an increase in the value assigned to school by Mayan children and a reduction in their participation in household work across generations (Rogoff et al., 2005). More recently, Ishihara-Brito (2013) found changes in the value assigned to education amongst Mayan parents from seven different cultural groups in four departments. Mayan mothers' contact with the institution of Western school has been related to changes in mother-child interactions in activities such as exploring a novel object, building a puzzle or participating in a problem-solving discussion (Chavajay, 2006; Chavajay & Rogoff, 2002; Rogoff et al., 1993). However, none of these observational studies focused on activities identified in previous research as supporting children's formal education. Thus, despite Mayan children's increased

participation in the institution of Western schooling, few studies have focused specifically on the role that their parents may play in directly fostering school-typical learning.

This dissertation explored Mayan parents' beliefs and commitments towards their children's formal education, and more specifically the ways in which they support their children in the task of learning to read. I focused on literacy development, as the ability to comprehend written language in the early years of primary school provides a critical foundation for a child's academic success (see Slavin et al., 1994 for a review). In the first study, I used grounded-theory methods to compare schooled and unschooled parents' ideas on the benefits of formal education for their children's futures and the commitments that they make to support their children's schooling, paying particular attention to interactions around written language. In the second study, I used a cluster-analysis approach to examine differences in the book-sharing styles between schooled and unschooled parents on the basis of the degree to which parents engaged their children as interlocutors in the interaction and of the type of content they emphasized. I focused in an in-depth examination of the parents' participation in a book-sharing interaction, as this specific activity has been connected to improvements in children's receptive and expressive language abilities and early literacy skills across a wide variety of populations with different nationalities, social classes, and ethnicities (e.g., Bus, van Ijzendoorn, & Pelgrini, 1995; Dickinson & McCabe, 2001; Leseman & de Jong, 1998; Teale, 1986; Scarborough & Dobrich, 1994; Sénéchal et al., 1998).

These two studies provide further evidence in support of Human Development and Social Change Theory by evidencing cultural change and continuity in Mayan

parents' beliefs about the benefits of formal education for their children's futures; the commitments they make towards their children's schooling; and the way in which they approach a book-sharing task. Taken together, they provide further evidence on parental schooling as an important influence in shaping children's learning environments, while calling attention to the potential role of other parents' experiences in shaping their beliefs and practices in communities undergoing social change.

Evidence of Cultural Change: Academic-Occupational Values and School-like Ways of Interaction between Parents and Children

The results of the first study suggested an increased presence of academic-occupational values amongst Mayan parents regarding their views of formal education. Parents in this study expressed the belief that formal education would allow their children to connect, navigate and survive in the world outside of their communities and gain access to salaried jobs. This instrumental view of formal education stands in contrast with previous accounts of Mayan communities in which parents' questioned the benefits of schooling for their children's futures (Gaskins, 1996; Rogoff, Correa-Chávez, & Navichoch Cotuc, 2005). Views on the benefits of formal education amongst the participants of this study were often expressed in terms of a desire for children to avoid the feelings of pain, regret, embarrassment and humiliation that the parents had experienced due to their lack of education. These feelings stood in contrast to feelings of excitement, happiness, pride and dignity if they were to see their children accomplish what they could not accomplish themselves.

The view that children's accomplishments will represent psychological benefits for the parents is consistent with what Greenfield (2009) has referred to "the

psychological pleasures of raising children” that are characteristic of the parent-child relation in industrialized societies. These findings also resemble findings of the psychological aspects involved in the value assigned to children by parents in other societies undergoing social change. For example, Kagitcibasi & Ataca’s (2005) found that as Turkish mothers became more educated, urbanized, and wealthier, there was a change in the value that they assigned to children. In 1975 mothers emphasized the economic/utilitarian value of children, understood as “children’s material benefits both while they are young and also when they grow up to be adults”. Three decades later, in 2003, mothers emphasized the psychological value of children, understood as the “psychological benefits of having children such as the joy, fun, companionship, pride, and the sense of accomplishment parents gain from having children” (p.319). Increases of children’s psychological value and decreases in their economic/utilitarian value, in contexts of socioeconomic development have also been found in Iran (Aghajanian, 1988) and Tanzania (Hollo & Larsen, 1997).

The presence of academic-occupational values amongst Mayan parents regarding their views of formal education was also evidenced in the ways in which they framed their aspirations for their children. Parents’ emphasis on feelings such as embarrassment, humiliation, pride and dignity to refer to their experiences of educational deficit and their aspirations for their children to have more years of formal education, are consistent with the public morality inherent in academic-occupational systems. In these systems the realization of potential and of personal value is equated with the individual’s position within the academic-occupational prestige hierarchy (LeVine & White, 1986). Thus, by seeing formal education as the avenue towards economic mobility with concomitant

psychological benefits, Mayan parents in this study expressed status-enhancement motives that are characteristic of an academic-occupational morality system providing evidence of significant shifts away from the value system described in ethnographies conducted during the 1980s and 1990s (Gaskings, 1996, 1999; Rogoff, 2003).

In contrast to previous studies, this study did not find marked differences in beliefs about the benefits of formal education for children's futures between schooled than unschooled mothers. Previous studies found that mothers with more education were more likely to desire that their children have positions which required an academic degree than mothers with less education (Levine et al., 2003, 2012). In this study schooled and unschooled parents were as likely to express the desire for their children to have a degree or become "professionals". Unschooled parents were also as likely as schooled parents to refer to the benefits of formal education as connected to psychological benefits. Thus, a lack of formal education did not necessarily act as an impediment for parental aspirations for higher levels of education for their children. On the contrary, for many parents their own feelings of personal deficit due to their lack of educational opportunity, acted as an important motivation to live up to their desire that their children have a different experience. This study thus suggests that the benefits of formal education may become apparent to parents through other experiences besides their participation in the Western institution of school.

There was also evidence of generational change in the commitments that parents make towards their children's schooling. Schooled and unschooled parents identified the efforts that they are making in sending their children to school and to provide them with necessary materials and time to invest in school activities over household work, as an

important break from their own childhood experiences. Previous studies had found a decrease in Mayan children's participation in household work across generations (Rogoff et al., 2005). This study shows that parents are playing an active role in this generational change by actively structuring their children's time in ways that privilege homework over engagement in household work or by simply providing their children with more time to spend in homework. The investment of financial resources in schooling and the reduction of children's participation in household work is a signal of the shift of the flow of financial resources from the older generation to the younger generation as societies move towards an academic-occupational model (LeVine & White, 1986).

Parental schooling did influence the types of commitments made by parents towards their children's schooling. Parents with less schooling were more likely to report investing their time in activities intended to increase their children's disposition towards schooling than parents with more schooling. Activities to infuse schooling with meaning reported by parents in this sample included sharing personal stories of their lack of educational opportunities and their ongoing struggles, engaging children in prayer to support them in learning to read, and providing them with words of encouragement to attend school and complete homework. Through these activities parents transmitted the high value that they attached to formal education, encouraged their children to take advantage of the opportunities that they were providing them, and created a sense of hope for the future. These types of commitment are consistent with documented resistance practices amongst other communities facing systemic forms of oppression in which oral narratives are used as way to create a history intended to break the links between the

parents' current occupational status and their children's future academic attainment (Gándara, 1995; Pérez Huber, 2009; Yosso, 2005).

Parents who had attended school were more likely to become engaged in school-supporting activities such as teaching their children how to trace letters and numbers, and providing direct help in their homework. These results are consistent with previous studies showing that schooled mothers were more likely to take on the role of teachers at home by teaching the alphabet, numbers and colors to their child before the child entered school and helping with homework (LeVine, 2012). There are also consistent with two cases from two different ethnographies in two different Mayan households in which the mothers, who had attended school, were engaged in their children's homework (Azuara & Reyes, 2011; Hamberg, 2011). Thus, parents' schooling influenced the creation of learning environments which were intended to support children's *procedural knowledge of literacy* or content based skills, understood as knowledge about the mechanics of reading and writing and the necessary skills to decode written language (Lesaux & Maritetta, 2012; Sénéchal et al., 2001).

Notably, even in households in which the parents had attended school there were few opportunities for children to interact with written materials besides those that were narrowly focused on letter tracing exercises. In most of the reports of the interactions with materials that were related to this task such as news papers, Bibles or hymn books, the interactions were initiated by children rather than by the adults. Some of the parents who read these materials to their children, saw these activities more as entertainment than as valuable activities for children's literacy development. Their view was based on the wide spread belief that children could carry out exercises in tracing letters and numbers

before school, but that they could only understand texts that were read to them after entering school. In line with this belief, some of the parents who had taught their children how to trace letters abstained from reading to them before they entered school. Thus parents' ideas about literacy development influenced the types of interactions with written language that they privileged.

In spite of parents' reports of not having read books to their children before they started attending school, almost a third of the parents displayed having the skills to do so during the semi-naturalistic observation of a book-sharing interaction. Parental schooling was related to the parents' book-sharing style. Schooled parents were more likely to spend more time reading from the book and to engage in conversations intended to make meaning of the story than parents who had not attended school. Previous studies have identified mothers' schooling as an important source of change in mother-child relations in Mayan communities. Schooled mothers were more likely to use verbal explanation and praise when interacting with a novel object with their toddlers (Rogoff et al., 1993), and to establish interactions that resemble those of students and teachers during a problem-solving interaction by using known-answer questions (Chavajay, 2006) than mothers without schooling. The results of this study extend these findings into a book-sharing context evidencing the use of test-like questions and verbal feedback amongst schooled parents.

Nevertheless, this study found some exceptions to this trend that call attention to the role of other parents' experiences in shaping their interactions with their children around a book. Almost half of the unschooled parents interacted with their children in ways that were unexpected, as they took on styles that resembled the interaction between

a teacher and a student. Two of these parents took the role of providing labels and/or descriptions taking thus the role of “teaching” and three of them took the role of asking questions that seemed to have the intent of verifying knowledge. Notably, the mothers asked the questions, yet did not necessarily provide verbal feedback to all of their children’s answers. It is plausible that even though the parents themselves had not attended school, they may have learned the behavior of verifying children’s knowledge by observing other schooled adults or older children interact in this way around books, without adopting the practice of providing verbal feedback. Many of these mothers considered that they did not have the skills to support their children’s schooling and thus left this task to other members of their families who had attended school.

Finally, one of the unschooled mothers who interacted with her children in ways that resembled a teacher-student relation in which she took charge of task, interacted in a very similar way to some of the schooled parents. This mother learned to read in her job working in sales at the municipality’s urban center. During the interaction she read from the book and made comments about the events in the story and the characters’ mental states, much like schooled mothers. Again, this mother considered that because she had not attended school she did not have the abilities to help her child, claiming that her role was to encourage her child to complete her homework and take advantage of school but not to intervene.

Evidence of Cultural Continuity: Respect for Children’s Autonomy, Obligations towards Others, and Egalitarian Ways of Interaction between Parents and Children

The results of this study also provide evidence in support of Human Development and Social Change Theory by evidencing the persistence of traditional values alongside

new values at time of rapid social change (Greenfield, 2009). Parents in this study endorsed traditional values of respect for children's autonomy and the parents' lack of power to influence their children's disposition. While more than half of the participants expressed a desire for their children to have a salaried job, almost a third argued that their children would be the ones to decide how far to go in their education. In many of these parents' accounts children's disposition towards school appeared to be a more important determinant in whether they would continue attending school than any perceived benefit for their future lives. The decision to allow children to decide how far to go in school is consistent with the traditional Mayan value of respect for children's autonomy to make decisions for themselves (Gaskins, 1996, 1999; Rogoff, 2003). Some of these parents also expressed the impossibility of influencing their children's disposition towards school. This view is also consistent with the traditional Mayan belief documented by Gaskins (1996) that "in many aspects, including intelligence, talents and dispositions, children were influenced almost completely by innate forces that were out of their own or their parents' ability to change or control" (p. 355).

Parents in this sample also displayed traditional values by identifying arrogance and forgetting one's obligations towards others as potential drawbacks of formal education, and by including values of respect, obedience and duty towards others as part of their aspirations for their children's future. These results suggest the possibility that at least in some cases the parents' aspirations for their children to attain a higher position within the academic-occupational hierarchy was connected to an expectation that their children will continue to contribute economically to their families and their communities. Parents from agrarian communities have been shown to hold the expectation that their

children will provide them with material aid especially in old age, in contrast to parents from industrial societies who do not hold this expectation (Levine & White, 1986; Greenfield, 2009). It is thus plausible that the view of the benefits of formal education to obtain a better paid job may be connected to an expectation that children will provide material aid to parents and others in the community once they obtain a job away from the community. Future studies should examine this possibility.

Finally, this study also found evidence of cultural continuity in parent-child relations by evidencing a preference for more egalitarian ways of interaction between some of the unschooled mothers and their children around the book. In contrast to mothers who took on the role of teaching or testing their children's knowledge, a group of the unschooled mothers engaged in more collaborative interactions in which they attempted to make sense of the book with their children by asking what appeared to be genuine questions. This way of interaction is consistent with the types of collaborative interactions that were described by Chavajay (2006) in a problem-solving discussion, which are better aligned with indigenous egalitarian forms of interaction. One of the mothers, Jessica, used the pictures to co-narrate a coherent story with her child and to talk about the characters' mental states, resembling in this way the type of talk displayed by schooled parents. While Jessica had not attended school and was unable to read she had considerable contact with stories as her husband read the Bible and other illustrated children's books to her and her children. In contrast to Rosario, the unschooled mother who had learned to read but preferred to not intervene in her child's schooling, and even to some schooled parents who claimed not having the necessary skills, Jessica took on a very active role in supporting her child's learning at home.

The results of a mixture of traditional and academic-occupational values and practices resonate with previous studies in other communities at times of rapid social change. Keller (2007) found that parenting practices of parents from traditional societies moving towards an industrialized model in Costa Rica, India and China were influenced both the values of interdependence of the previous generation, as well as by their own adaptations to their present urban middle-class lifestyle. Fong (2007) found that Confucian values of obedience, excellence, independence and caring/sociableness persisted alongside Chinese parents' desires for their children to be self-assertive and competitive to gain better positions as their community moved closer to a capitalist system. Goldenberg and Gallimore (1995) and Reese et al. (1995) found that as first-generation parents from rural communities in Mexico and Central America came in contact with the way of life of urban communities in the United States, they endorsed academic-occupational values by viewing formal education as the path to a better job, which in many cases evidenced a conscious break from the educational values of their parents. At the same time, they also expressed the belief that schooling (academics) and upbringing (morals) were intertwined, and that moral values were the basis for academic success. The coexistence of traditional and academic-occupational values in these four Mayan communities thus provides further evidence to this growing field.

In sum, schooled and unschooled parents displayed academic-occupational and traditional beliefs about the benefits and potential drawbacks of formal education for their children's future. Both groups of parents reported their commitment to invest financial resources and time to support their children's schooling. Nevertheless, they differed in the specific types of activities in which they invested their time. Unschooled parents were

more likely to report activities intended to increase their children's disposition towards schooling than schooled parents. In contrast, parents with schooling were more likely to report being engaged in text-based activities than parents without schooling.

Unexpectedly, some unschooled parents took roles that resembled those of teachers during the book-sharing interactions. These mothers asked questions to their children in which they seemed to be testing their knowledge. Interestingly, they differed from schooled parents in the lack of verbal feedback. It is plausible that these mothers were reproducing behaviors that they observed as other schooled family members interacted with children around their books, or that they in fact did not know the answer themselves. However, given their body language this option is less likely. In any case, future studies should include methodologies that allow teasing out these two possibilities.

More surprisingly, one unschooled mother who was not able to decode written language displayed a similar type of talk than some of the parents who were able to read. These are encouraging examples of how the introduction of a book might elicit engaged and interesting conversations about topics beyond the here-and-now which are important for supporting students' language and literacy development. By being free from the overemphasis on basic code-based skills on code-based skills, one of these mothers was able to engage her child precisely in the more challenging meaning-making discussions that are so critical to prepare students for literacy. Learning from exceptional cases such as this one is a promising, yet underexplored path for intervention research to promote culturally relevant practices that build from the behaviors of caring, committed and language/literacy savvy unschooled parents.

The unexpected findings in these studies call attention to the role of parents' out-of-school experiences in shaping their beliefs about formal education, their abilities to support their children's literacy development, and their perception of the roles that they are able or unable to play in their children's schooling.

Future Directions

This study represents a first step in characterizing the role of rural K'iché speaking Mayan parents from different schooling levels in supporting their children's schooling by exploring their beliefs and commitments towards formal education and characterizing their book-sharing styles. The limitations of this study signal the way for future efforts.

First, the sample of this study was limited by the possibility that parents' had participated in a literacy program making them ineligible to participate. Future studies should seek to include a larger sample of parents, including parents who have made the decision to not send their children to school, to provide a more complete picture of current beliefs about the benefits and drawbacks of formal education in Mayan communities. Second, this study was limited in its reliance on parents' accounts and the use of a semi-naturalistic approach. There is a need for more ethnographic work on parent-child interactions in Mayan communities which is specifically focused on the role that parents' may play in supporting their children's schooling. For example, future studies could use semi-naturalistic tasks to examine parent-child interactions in contexts other than book sharing, such as conversations about the past and interactions with written materials that are available in these parents' homes such as newspapers, Bibles and other religious materials. More generally, these two studies highlighted the importance of other parental experiences besides formal schooling in shaping their

interactions with their children. There is thus a need for more studies that examine the influence of other contexts from parents' lives such as work, participation in religious congregations and interactions with other adults in parent-child interactions.

Implications for Policy and Practice

The results of these studies have some general implications for schooling in Mayan communities, and more specific implications on to support children's literacy development at school and out-of-school.

In terms of general implications for schooling in Mayan communities, the results of this study signaled the need to further reduce economic barriers for Mayan children to attend school along with policies intended to increase children's motivation and enjoyment of schooling. Participating parents were making substantial investments of the family's economic resources to ensure that their children attended school. In spite of this, many worried about their abilities to cover for the expenses associated with sending children to school particularly if children decided to continue beyond primary school. Given parents' respect for children's autonomy, a lack of motivation to attend school may act as a potential risk factor for school-dropout. There is thus a need for interventions that make schools more responsive to the students' needs and foster children's motivation and enjoyment of school. These interventions face the dual challenge of fostering children's skills to connect and function within the mainstream society, while also promoting traditional Mayan values of solidarity and obligation towards others as this continues to be a priority for some parents in this communities.

In terms of literacy development, the results of this study signaled a preference at school and home for activities intended to strengthen children's procedural literacy skills

of recognizing and tracing letters. In general, children in these communities had few opportunities to experiment using written language for authentic communicative purposes which would allow them to develop their conceptual knowledge of literacy (i.e., their understanding of the acts of reading and writing and the functions of printed artifacts, their self-perception of themselves as readers, and their emergent reading behaviors in context). There is thus a need for professional development that provides teachers with a deeper understanding of literacy development beyond the acquisition of procedural literacy skills and that equips them with the ability to create learning activities in which written language is used for authentic communicative purposes.

A concomitant implication is the need to support parents in expanding their understanding of literacy development so they can build off the skills that they have and enrich the practices that they are already carrying out at home. The preference for code-based activities was evidenced even amongst parents who reported having interacted with their children around reading materials such as news papers and religious materials at home, and amongst parents who displayed a book-sharing style that was focused on making meaning of the story. Family literacy programs should share knowledge on the importance of conceptual literacy skills for literacy acquisition and encourage parents to celebrate and promote their children's spontaneous efforts to explore written materials, even if the child has not mastered the skill of tracing letters. In promoting interactions around books, these programs could support parents by providing them with different options that respond to their children's language and literacy skills and that are well-aligned with the ways of interaction that feel most comfortable to them. Rather than seeking to train parents in skills displayed by the trainers, these programs could create

learning environments for parents to recognize the skills they already have and learn skills from other parents in their communities. Finally, programs could strengthen some of the culturally-relevant practices reported by parents, such as conversations about past experiences and engagements with religious texts, as alternative ways to support children's language and literacy development at home and in other community spaces.

Appendix – Interview protocol

1. Introduction:

Thank you very much for taking the time to meet with me today. As you know, I am a student of education and I am here in Guatemala to learn more about *Leer Juntos*, *Aprender Juntos* –a program that is working in this community. I am also interested in learning more about how parents' interact with their children and how they understand reading and writing. Let's go through the letter in which I describe the purpose of this interview and the way in which you were selected that we discussed last time. Do you have any questions?

Remember that you are free to end the interview at any time, if you choose, by letting me know. You are also free to skip any question and continue to participate. Whether you decide to participate or not will not affect your relationship with the school or with *Leer Juntos*, *Aprender Juntos*. Are you willing to participate?

2. Family Background

Date and time:		Community:	
Name of the child:			
Name of the interviewee:			
Relation to the child:		Gender F [] M []	
Educational level:			
Mother language:		If it's not Spanish, how did you learn it?	
Interviewee code:			

Household members

Relation to the child	Age	Educational level	Language spoken to the child	Occupation

3. Book sharing task ¹⁰

Instructions:

- I am curious to know more about the way in which parents and children use books at home.
- I have brought this book with me so you can share it with each other. Although the book is in Spanish, you should feel free to talk about it in the language that you prefer.
- You can have as much time as you need and you can talk with each other as you would normally would. I will make a video so I don't have to make any notes.

Questions after the task:

- What was your experience during this activity?

Probe for:

- Is this something that you are used to doing with each other?
 - How often do you do it?
 - How do you feel about this activity?
 - How does your child feel?
- Is this something that you do with your other children?
 - How often do you do it?
 - How do you feel about this activity?
 - How do your other children feel?
- How would you describe this activity for another parent? (Was it enjoyable, fun, boring, challenging?)
- Is this something that other members of your family do with the child?
 - How often do they do it?
 - How do they feel about this activity?
- Where do you obtain the books to share with each other?
- Is this helpful for children who are learning to read? Why or why not?

¹⁰ Instructions for the book-sharing task are based on the instructions provided by Melzi and Caspe (2005, 2011).

4. Interview questions

Family background¹¹

- How long has the family lived in the area?
 - If they are not from the area, where did you come from and how long ago?
- Have you lived in another or visited other communities or cities?
 - Do you consider them to be similar or different to the culture of this community?

Parents' engagement in child-centered interactions with their children¹²

Researcher questions/aims	Interview questions
What are children's daily routines as described by parents? Are print-based activities and/or interactions that support oral language development salient in this description?	Let's talk about _____ • What does a typical day look like for _____ from morning to bedtime? • What things does _____ enjoy? Encourage the parent to talk freely here about their children and their daily routines, with attention to who they are with at different times of day (parents, siblings, cousins, neighbors, grandparents or aunt and uncles) and the activities that they engage in.
What are the activities that parents consider "typical" in their interaction with their children? Do they engage in the types of child-centered language interactions promoted by LB with their children?	• When are you and _____ together in the same place? • What do you typically do when you and _____ are together? Probe for details about what they do and why with the child-centered language activities promoted by LB in mind: • When you are at home doing daily activities such as cooking or weaving, is your child with you? What happens in these moments? • Do you go to the town or the fields together? What happens when you are outside? • Do you tell stories to your child or talk about things that have happened? Can you give us an example? • Are there times when you are together without speaking to each other? • What do you and _____ enjoy doing together?

¹¹ Questions taken from Rogoff et al.'s (1993) description of the initial family interview.

¹² Questions for the family routines sections are based on Edwards et al. (1994).

Parents' understanding of language and literacy development¹³

Researcher questions/aims	Interview questions
What are the skills that parents identify when speaking about their children's development?	All children have potential. Did you feel that - _____ had some particular talent or "gift" early on? Probe: ○ What is this talent? ○ What did _____ do to make you think that he/she had this potential? ○ Were there specific things you did as a parent to strengthen this talent?
How do parents describe their child's process of learning to talk and their role in this process?	• When did _____ learn to talk? • How _____ learn to talk? • Did you do anything to encourage this process? “Some parents think that some children are natural talkers and others are silent, and people around them do not have much influence over this, what do you think about this?”
What are parents' attitudes towards common emergent reading behaviors (e.g. noticing print and letters, pretend reading, scribbling, telling stories, signing songs)? Have parents noticed their children engaging in these activities? What do they think about them?	• Would you say that _____ knows how to read and/or write? How do you know? • Have you ever noticed that she/he asks questions about letters or signs (e.g. in boxes or cans)? What do you think about this? • Does she/he ever use books, magazines, or other reading materials? What does she/he do with them? What do you think about this? • Does she/he use pencils and paper? What does she/he do with them? What do you think about this? • Does he tell stories? What do you think about this? • Does he sign songs? What do you think about this?
How do parents think children learn to read and write?	• How do you think children learn to read and write?

¹³ Questions for the section on parents' understanding of language and literacy development are based on questions used by Edwards et al. (1994), Rogoff et al. (1993) and Reese & Gallimore (2002). I have also followed Reese & Gallimore's (2002) approach to include explicit statements of beliefs and attitudes about language and literacy development for parents to provide their opinions on these statements.

What are parents' attitudes towards reading to children?	"Some parents think that reading to children before they enter school is a waste of time because they do not understand what they are listening to". What do you think about this? Probe: • When would it be appropriate to read to children? • Did you read to _____ before he/she entered school? • From what age did you begin reading to _____? • In what language did you read to _____? • How should children behave if someone is reading to them? "Some parents think that parents have some responsibilities but the responsibility of teaching children to read belongs to the school". What do you think about this?
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Parents' description of their role in supporting their children's literacy, and their confidence in whether their efforts will have an impact¹⁴

Researcher questions/aims	Interview questions
How do parents understand the children's role, the school's role and their own role in supporting their children's literacy development? What is parents' confidence in whether their efforts will make a difference?	• Leer Juntos, Aprender Juntos's is a program intended to help your child become a good reader. How could your child become a good reader? • How can the school affect whether your child becomes a good reader? • How can you affect whether your child becomes a good reader? Probe: ○ What are some of the things that you did last week at home? ○ What are some of the things that you did last week at school? ○ What are some of the things that you did last week at other community spaces (e.g. church, the market)? ○ Are there other things that you do regularly that you did not get to do last week? • What, if anything, do you do when your child has a hard time reading?

¹⁴ Questions for this section are based on the constructs of "parents' role construction" and "self-efficacy" as described by Hoover-Dempsey's and Sandler's (1997) framework. The second section explores parents' description of their role in supporting their children to become good readers and the confidence in whether their efforts will make a difference, probes on parents' support for children when they face a difficulty with a book and to motivate children to read are from project READS.

	• What, if anything do you do to motivate your child to read? • How useful do you think these activities are in helping your child? Why do you think this is? • How confident do you feel engaging in these activities? • What more would you do if you could? What makes it hard to do these things?
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Parents' literacy experiences¹⁵

Researcher questions/aims	Interview questions
How do parents understand their own experiences growing up in relation to those of their child?	Was your own experience when you were a child similar or different from that of your child? How so? Probe for: • What types of activities did you do with your parents? • In which language did you communicate with them? If the interactions are different, • What motivated you to be different with your children? • How did you know what to do differently?
How do parents describe their past experiences learning to read and write?	Did you learn to read and write? If yes, • When, where and with who did you learn to read and write? In both cases, • How would you describe this experience? • How did you feel about reading and writing growing up? • How did you use reading and writing as you were growing up? • How do you feel about reading and writing currently? ○ Could you share a time when you felt good about reading? ○ Could you share a time when you felt good about writing? ○ How about a time when you felt bad or wanted to have better reading abilities? ○ How about a time when you felt this way about writing?

¹⁵ Questions for the parents' literacy and schooling experiences section are based on a project on immigrant mother's perceptions of Somerville Public School's treatment of "culture" I conducted for an Action Research class project and were revised in a pilot with an immigrant Quiché mother in Boston and the two interpreters in Santa Cruz.

How do parents understand the differences of a “literate” and “illiterate” person?	• Do you know people who consider do not know how to read and write? • How would you describe the difference between an illiterate and a literate person?
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Initial perceptions of community-based activities:

Researcher questions/aims	Interview questions
Parents’ general knowledge about the program and sources of information.	• What do you know about <i>Leer Juntos, Aprender Juntos</i>? Probes: ○ What is the program about? ○ What activities do they do in the community? ○ How did you learn this information? ▪ Program staff? ▪ Other parents in the community? ▪ Community leaders? ▪ Teachers?
Parents’ expectations about the program	Leer Juntos, Aprender Juntos seeks to support your child in becoming a better reader through community based activities and parent workshops. • Do you expect to attend the parent workshops? ○ If so, what would you like to learn? ○ If not, why will you abstain from attending? • Do you expect that your child will attend the community activities? ○ If yes, what do you think you could gain? ○ If not, why would your child not attend?

Closing

- Is there anything else that you would like to tell me about anything that we have talked about today?

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