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Ochoa, Esperanza

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UNIVERSITY OF CALIFORNIA SAN DIEGO

SAN DIEGO STATE UNIVERSITY

Parental Involvement in Mathematics Education at the Middle School Level

A dissertation submitted in partial satisfaction of the requirements for the degree
Doctor of Philosophy

in

Mathematics and Science Education

by

Esperanza Ochoa

Committee in Charge:

University of California San Diego

Professor Marta Civil
Professor Sherice Clarke
Professor Alison Wishard Guerra

San Diego State University

Professor William Zahner, Chair
Professor Sera Hernandez
Professor Kathleen Schenkel

The Dissertation of Esperanza Ochoa is approved, and it is acceptable in quality and form for publication on microfilm and electronically.

Chair

University of California San Diego

San Diego State University

2026

DEDICATION

En primer lugar, este trabajo fue posible gracias a la voluntad, la gracia y las bendiciones de Dios. Dedico este trabajo, con profundo amor y gratitud, a mis padres. No existen palabras suficientes para expresar cuánto agradezco el apoyo incondicional, el amor y los sacrificios que han realizado a lo largo de mi vida. Este logro también les pertenece. Que Dios los bendiga hoy y siempre. Muchísimas gracias a mis hermanos y hermanas por acompañarme y brindarme su apoyo constante durante esta jornada y en cada etapa de mi vida. A toda mi familia, así como a mis amigos y amigas, gracias por su apoyo y por motivarme siempre a seguir adelante. A mi esposo, Sorena, mi compañero de vida y de servicio, te agradezco tu amor y apoyo, especialmente durante la etapa final de este proceso. Doy gracias a Dios por la bendición de compartir esta vida con una persona de tan noble y hermosa alma. Finalmente, dedico este trabajo, así como cualquier otro fruto que pueda alcanzar en esta vida, a mi querida y extraordinaria bendición, Leonora. Que Dios te bendiga siempre y que siempre posees un corazón puro, bondadoso y radiante.

EPIGRAPH

Regard man as a mine rich in gems of inestimable value. Education can, alone, cause it to reveal its treasures, and enable mankind to benefit there from.

Baha'u'llah

... Make ye a mighty effort, and choose for yourselves a noble goal.

‘Abdu’l-Bahá

To walk where there is no path,
To breathe where there is no air,
To see where there is no light-
This is Faith.

To cry out in the silence,
The silence of the night,
And hearing no echo believe
And believe again and again
This is Faith.

To hold pebbles and see jewels
To raise sticks and see forests
To smile with weeping eyes
This is Faith.

To Say: ‘God, I believe’ when others deny,
‘I hear’ when there is no answer,
‘I see’ though naught is seen-
This is Faith.

And the fierce love in the heart,
The savage love that cries Hidden
Thou art yet there!

Veil thy face and mute thy tongue
Yet I see and hear Thee, Love,
Beat me down to the bare earth,
Yet I rise and love Thee, Love!
This is Faith.

Ruhiyyih Khanum

TABLE OF CONTENTS

DEDICATION	iv
EPIGRAPH	v
TABLE OF CONTENTS	vi
LIST OF ABBREVIATIONS	x
LIST OF FIGURES	xi
LIST OF TABLES	xii
ACKNOWLEDGEMENTS	xiii
VITA	xiv
Chapter 1: Introduction and Motivation	1
1.1 Positionality	5
<i>1.1.1 Vignette: Parents Helping Their Children with Mathematics</i>	<i>5</i>
<i>1.1.2 Vignette: Parents Participating in Parent-Teacher Home Visits</i>	<i>6</i>
<i>1.1.3 Vignette: Parents Participating in Mathematics Education Research</i>	<i>9</i>
1.2 How These Experiences Influence This Dissertation Work	10
Chapter 2: Literature Review	15
2.1 Key Terms and Phrases	15
2.2 Parental Involvement Research	17
<i>2.2.1 Dominant Frameworks on Traditional Forms of Parental Involvement</i>	<i>18</i>
<i>2.2.2 Two Dominant Parental Involvement Frameworks</i>	<i>20</i>
<i>2.2.3 Ignoring Social Injustices and Acknowledging Non-Traditional Forms of Parental Involvement</i>	<i>26</i>
<i>2.2.4 Parental Involvement in Mathematics Education</i>	<i>29</i>
2.3 The Two Frameworks Guiding This Study	34
<i>2.3.1 Funds of Knowledge for Teaching Framework</i>	<i>34</i>
<i>2.3.2 Parental Involvement Framework</i>	<i>36</i>
2.4 Federal Regulations for Parental Involvement in Public Educational Institutions	40
2.5 This Research Study	42
Chapter 3: Methods	45
3.1 Theoretical Framework	45
<i>3.1.1 Viewing Funds of Knowledge as Cultural Tools</i>	<i>46</i>
<i>3.1.2 Viewing Parents from Culturally and Linguistically Diverse Communities as Intellectual Resources</i>	<i>48</i>

3.1.3 <i>How Theoretical Basis Shapes Research Questions</i>	49
3.1.4 <i>Critical Ethnographic Research Approach</i>	50
3.2 Selection Criteria	51
3.3 Study Timeline	55
3.3.1 <i>Pilot Phase</i>	56
3.3.2 <i>Data Collection Phase</i>	57
3.3.3 <i>Data Analysis Phase</i>	61
3.4 Validity and Potential Biases	70
3.5 Presentation of the Following Chapters	71
Chapter 4: The Case of Magnolia Middle School	72
4.1 Overview of Major Points in Magnolia Middle School Key Documents	73
4.1.1 <i>Goal One of LCAP: Create an Inclusive Environment</i>	74
4.1.2 <i>Goal Five of LCAP: Family and Community Engagement</i>	76
4.1.3 <i>Family Engagement Team</i>	77
4.1.4 <i>Summary of Key Documents Findings</i>	78
4.2 Parents' Perspectives	79
4.2.1 <i>Parents' Participation in the School's Parent Engagement Structures</i>	80
4.2.2 <i>Parents' Hopes and Aspirations</i>	87
4.2.3 <i>Parents' Hopes and Aspirations in Mathematics Education</i>	92
4.2.4 <i>Parents' Funds of Knowledge</i>	95
4.2.5 <i>Summary - Magnolia Parents' Perspective</i>	99
4.3 School Personnel's Perspectives	100
4.3.1 <i>School Personnel's Perspective: Reasons for & Challenges of Parent Involvement</i>	101
4.3.2 <i>School Personnel's Perspective: Parents' Participation in School's Parent Involvement Structures</i>	103
4.3.3 <i>School Personnel on Parental Involvement in the Mathematics Program</i>	110
4.3.4 <i>School Personnel on Parents' Funds of Knowledge</i>	114
4.3.5 <i>Parents Shaping Parent Involvement</i>	116
4.3.6 <i>Magnolia Middle School Personnel Summary</i>	117
4.4 Magnolia Middle School Case Conclusion	118
Chapter 5: The Case of Pacific Charter School	120
5.1 Overview of Major Points in Pacific Charter School Key Documents	121
5.1.1 <i>Home-School Compact</i>	122

5.1.2 <i>SARC Engagement Goal: Parental Involvement</i>	123
5.1.3 <i>Pacific Charter Key Documents: Summary</i>	126
5.2 <i>Parents' Perspective</i>	127
5.2.1 <i>Reasons & Challenges for Parent Involvement</i>	128
5.2.2 <i>How Parents Respond to Pacific Charter School Parent Involvement Structures</i>	131
5.2.3 <i>Parents' Hopes and Aspirations</i>	135
5.2.4 <i>Parents' Funds of Knowledge</i>	138
5.2.5 <i>Drawing on Funds of Knowledge for Children's Mathematics Education</i>	142
5.2.6. <i>Challenges in Supporting Children in Mathematics Education</i>	144
5.2.7 <i>Parents' Perspective: Summary</i>	145
5.3 <i>School Personnel's Perspective</i>	147
5.3.1 <i>School Personnel's Perspective: Parent Involvement Reasons & Challenges</i>	148
5.3.2 <i>School Personnel's Perspective: Parents' Participation in the School's Parent Involvement Structures</i>	151
5.3.3 <i>School Personnel's Perspective: Parents' Participation in the School's Mathematics Parent Involvement Structures</i>	156
5.3.4 <i>School Personnel's Perspective: Parents Drawing on Funds of Knowledge for General and Mathematics Education</i>	158
5.3.6 <i>Mr. Minh's Case</i>	161
5.3.5 <i>School Personnel's Perspective: Summary</i>	163
5.4 <i>Pacific Charter Case Conclusion</i>	163
Chapter 6: <i>Cross Case Analysis</i>	165
6.1 <i>Schools' Parent Involvement in Documents</i>	166
6.1.1 <i>Main Parent Involvement Structure</i>	167
6.1.2 <i>Home-School Compact</i>	171
6.1.3 <i>Summary</i>	176
6.2 <i>School Personnel's Perspective of Parental Involvement</i>	177
6.2.1 <i>Views of Parental Involvement in Mathematics Education</i>	179
6.2.2 <i>Summary</i>	182
6.3 <i>Parents' Perspective on Parent Involvement</i>	182
6.3.1 <i>Parents' Perspective of Their Role in Mathematics Education</i>	186
6.3.2 <i>Summary</i>	191
6.4 <i>Overall</i>	192
Chapter 7: <i>Conclusion</i>	194

7.1 Introduction	194
7.2 Theoretical Implications	196
7.2.1 School Structure.....	197
7.2.2 School-Level Mathematical Content	198
7.2.3 Adolescent Development	199
7.3 Practical Recommendations.....	200
7.3.1 School Structure - Advisory Teacher Model	201
7.3.2 School-Level Mathematical Content in Mathematics Workshops.....	202
7.3.3 Adolescent Development - Content of Mathematics Workshops	205
7.3.4 Adopting Improvement Cycles as a Mode of Operation	206
7.4 Future Studies	207
7.5 Conclusion.....	208
References	211
Appendix A: Interview Protocol for Administrators, Faculty, and School Personnel on Parental Involvement	223
Appendix B: Interview Protocol for Parents	225
Appendix C: Spanish - Interview Protocol for Parents.....	227

LIST OF ABBREVIATIONS

Ambitious Mathematics Teaching (AMT)

California Department of Education (CDE)

Community-Based Organizations (CBO)

District Advisory Committee (DAC)

Darwin University (DU)

English Learner Advisory Committee (ELAC)

Every Student Succeeds Act (ESSA)

General Educational Development (GED)

Individualized Educational Plan (IEP)

Junior Scholars (JS)

Local Control and Accountability Plan (LCAP)

Local Educational Agency (LEA)

Math and Parent Partners (MAPPS)

Parent-Teacher Association (PTA)

Plan-Do-Study-Act (PDSA)

Research Question (RQ)

San Miguel Unified School District (SMUSD)

School Accountability Report Card (SARC)

School Governance Team (SGT)

School Plan for Student Achievement (SPSA)

School Site Council (SSC)

Western Association of Schools and Colleges (WASC)

LIST OF FIGURES

Figure 2.1: Example of a Family’s Funds of Knowledge.....	35
Figure 3.1: Data Comparison of the Two School Sites.....	55
Figure 3.2: Timeline for Data Collection	57
Figure 3.3: Six-Phase Thematic Analysis Approach	62
Figure 3.4: Phase 3 (Descriptive Codes to Concepts).....	65
Figure 3.5: Phase 4 (Concepts to Themes)	66
Figure 3.6: Phase 5 (Connecting Themes to the Framework)	67
Figure 3.7: Phase 5 (Themes and Funds of Knowledge)	68
Figure 4.1: Magnolia Middle Parent Involvement Plan	79
Figure 4.2: Main Reasons and Challenges for Parental Involvement at Magnolia Middle.....	92
Figure 5.1: Pacific Charter Parent Involvement Plan.....	127
Figure 6.1: Main Parent Involvement Structure Across Sites.....	170
Figure 6.2: Parent Communication with School Personnel Across Sites	176
Figure 6.3: Parent Involvement in Mathematics Education at Both School Sites	181
Figure 6.4: Parents’ Perspective on General Parent Involvement	185
Figure 6.5: Parents’ Perspective on Parent Involvement in Mathematics Education	190

LIST OF TABLES

Table 2.1: Epstein's (1992) Six Types of Involvement Framework	21
Table 2.2: Dual Capacity-Building Framework (First and Second Versions) Parent Outcomes ..	25
Table 2.3: Civil et al (2005)'s Parents as an Intellectual Resources Framework	37
Table 3.1: Relationship Between Research Questions (RQ) and the Conceptual Framework	50
Table 3.2: Summary of Dissertation Timeline	56
Table 3.3: Connection Between Descriptive Codes and Research Questions.....	64
Table 3.4: Relationship Between Data Sources, Phases 2-6, and Research Questions.....	69
Table 3.5: Relationship Between Research Questions, Data Collection, and Data Analysis.....	70
Table 4.1: Parents Interviewed at Magnolia Middle.....	80
Table 4.2: School Personnel Interviewed at Magnolia Middle	101
Table 5.1: Home-School Compact from Pacific Charter	123
Table 5.2: Parents Interviewed at Pacific Charter	128
Table 5.3: How Far Each of the Parents Interviewed Lives from Pacific Charter.....	140
Table 5.4: School Personnel Interviewed at Pacific Charter.....	148
Table 6.1: Overall Description of Different Parent Categories Based on Civil et al. (2005).....	166
Table 6.2: Home-School Compact from Pacific Charter	172

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VITA

2014	Bachelor of Science, University of California Los Angeles
2015	Master of Art, University of California Los Angeles
2021	Master of Art, San Diego State University
2026	Doctor of Philosophy, University of California San Diego & San Diego State University

ABSTRACT OF THE DISSERTATION

Parental Involvement in Mathematics Education at the Middle School Level

by

Esperanza Ochoa

Doctor of Philosophy in Mathematics and Science Education

University of California San Diego, 2026
San Diego State University, 2026

Professor William Zahner, Chair

Title I schools are required to promote meaningful parent and family engagement; however, research suggests that many parents in minoritized communities often feel ignored, undervalued, or unwelcome in school settings. In mathematics education, parents frequently mentioned feeling ill-equipped to support their children's learning, in part because schools often fail to recognize or leverage the mathematical knowledge and resources families possess. This

study contributes to ongoing efforts to reexamine parental involvement in middle school mathematics education within culturally and linguistically diverse communities.

Using an ethnographic case study approach, this dissertation examined parental involvement at two Title I middle schools—a public school and a charter school—serving predominantly minoritized student populations. Guided by Civil and colleagues’ (2005) framework of parents as intellectual resources and Moll et al.’s (1992) concept of funds of knowledge, the study investigated how educators conceptualize parental involvement in education and mathematics education, and how Latinx and other minoritized parents understand and describe their roles in supporting their children's learning. Data sources included participant observations, school documents, and interviews with parents, teachers, administrators, and other school personnel. Data were analyzed using inductive and deductive thematic analysis.

Findings indicate that parental involvement at both sites was primarily framed through traditional school-centered expectations, positioning parents largely in supportive and compliance-oriented roles rather than as intellectual resources. Parent-school communication was often limited, and opportunities for meaningful family-school partnerships were constrained by institutional and structural factors. Although both schools demonstrated efforts to engage families, existing practices only partially recognized and leveraged parents’ cultural, linguistic, and experiential strengths, particularly in mathematics education.

The findings extend existing understandings of parental involvement during the transition to middle school by highlighting how school structures, increasingly complex mathematics content, and adolescent development shape opportunities for family engagement. The study suggests that advisory programs, mathematics-focused parent workshops, and partnerships with community organizations may strengthen family engagement and parent advocacy. More

broadly, the findings support expanded, asset-based conceptualizations of parental involvement that recognize the diverse ways families contribute to students' mathematical learning across home, school, and community contexts.

Chapter 1: Introduction and Motivation

...For us as poor and oppressed people to become a part of a society that is meaningful, the system under which we now exist has to be radically changed. This means that we will have to learn to think in radical terms. I use the term 'radical' in its original meaning—getting down to and understanding the root cause. It entails confronting a system that does not meet your needs and devising ways to change it. (Ella Baker in Moses & Cobb, 2001, p. 193)

Ella Baker, quoted above, believed in the power of grassroots activism; she felt that ordinary Americans must be active participants in the civil rights movement (Moses & Cobb, 2001, p. 193). The 1950s-1960s civil rights movement was an American struggle for social justice when many minoritized groups, groups positioned to be subordinates in the current societal structures, mobilized from the grassroots and engaged in a long struggle for social equality and social justice. Inspired by Ella Baker and the civil rights movement, and drawing on the power of grassroots activism, Robert Moses founded the Algebra Project, which aimed to improve the mathematics education of Black children living in minoritized communities (Moses & Cobb, 2001). Moses believed that if students from minoritized communities had access to quality mathematics literacy, they could develop the necessary mathematical skills to succeed in higher education and the workforce. He argued that without quality mathematics literacy, students from minoritized communities would remain in a space within the larger social and political world that structurally blocks students in lower academic paths. The Algebra Project was viewed as a community-based structure that would expand from limited participation to full, empowering participation in the mathematics classroom.

The Algebra Project, inspired by the civil rights movement, illustrates the powerful impact that committed parental involvement can have on mathematics education. It began in 1982 when Robert Moses, concerned about his daughter's experience in math, volunteered in her

eighth-grade classroom to help her and three other students with algebra. He noted that the minority students in his daughter's integrated school were performing below grade level in mathematics. As he continued to teach algebra to a few students, parents noticed a positive shift in their children's attitudes toward math. The next year, a group of parents met to discuss the needs and "the academic challenges minority students face for some time" (Moses & Cobb, 2001, p. 98). The following year, the Algebra Project was officially recognized in that school, and by 1987, the Algebra Project was in various schools and supported by funders and university partnerships.

The Algebra Project is an example of how a group of parents can initiate a social movement toward improving the mathematics literacy of students from minoritized communities across the country. The Algebra Project is now a national entity supporting Black and Latinx children, and other minoritized communities who have historically received low-quality mathematics education. The Southern Illinois University Edwardsville (SIUE) (2016) noted that the Algebra Project has increased high school graduation rates in the minoritized communities where the Algebra Project is established. Specifically, participating students in the Algebra Project improved in mathematics proficiency, achieving a level of understanding of algebraic concepts higher than non-participating students and at the level of college students (SIUE, 2016). Lastly, the students who participated in the Algebra Project developed a more positive attitude toward mathematics and mathematics achievement.

Often, schools within minoritized communities are classified as Title I schools and have mandated parental involvement requirements. Title I schools are those that receive federal supplemental financial assistance to help "disadvantaged students meet state academic and performance standards;" "disadvantaged students" include low-income, migratory children or

“neglected or delinquent children and youth” (CDE, 2024). To meet these federal requirements, Title I grants are based on school poverty rates measured by the number of “public school children eligible for free and reduced-price lunch (FRPL)” (CDE, 2024a). One of the requirements of Title I schools is to create a parent and family engagement policy, with the objective of fostering meaningful parent and family involvement. According to the American Institute of Research, Title I schools are mandated by a federal policy to ensure that parents make “informed decisions about their children’s education” and advocate “for school and system change” (Boyle & Lee, 2016, p. 17). Yet researchers who have worked closely with parents in schools serving mostly minoritized communities have reported that parents did not feel welcomed, needed, or well-informed (Baquedano-López et al., 2013; Woods, 2023). One study with four working-class African American mothers found that all parents expressed feeling ignored and unwelcome in their approaches to support the education of their children (Allen & White-Smith, 2018). Similarly, in a study with Latinx parents in a minoritized community, Quintos et al. (2019) found that the feeling of not being needed or not feeling welcomed is potentially rooted in schools’ “legitimizing specific mathematics knowledge over [the parents’] knowledge” (Quintos et al., 2019, p. 179). For example, if students learn mathematics differently from how their parents learned it and the students are encouraged not to learn other ways, parents might feel powerless or not needed to help their students (Woods, 2023).

Informed parents can also advocate for a better school mathematics education for their children. In a study with middle-class African American parents, Howard and Reynolds (2008) found that parents were better able to advocate for their students when they were well-informed about school matters. Similarly, parents of students from minoritized communities would be able to advocate for their children if they were as equally informed as middle-class parents in other

neighborhoods. For example, parents should be informed that students from minoritized communities in low-tracked mathematics courses are more likely to stay in low-tracked courses throughout high school (Joseph et al., 2017). They should also be informed that the research, for example, mentions that preparation for advanced courses starts in middle school algebra (Moses & Cobb, 2001). My study assumes that all parents want what is best for their children, and they will advocate for providing a good education for their children.

As educators, we need to understand how we can strengthen the parent-school partnership within minoritized communities. In a study carried out with well-experienced mathematics educators, educators pointed out the “importance of parent perception in understanding the disconnect between them, their students, and teachers” (Woods, 2023, p. 327). This disconnect is wider if there is a lack of cultural relevance within the mathematics curriculum, if the schools have limited resources, and if there is little to no outreach for meaningful parental involvement (Woods, 2023). Parents in minoritized communities must have access to a wealth of opportunities for meaningful parent-school collaboration so they can adequately advocate for the best interests of their children’s school mathematics (Howard & Reynolds, 2008; Woods, 2023).

My experiences in school, work, and community engagement made me aware that parents from minoritized communities play a significant role in the mathematics education of their children. My study explores the role of parents from minoritized communities in mathematics education. My positionality undoubtedly influences my research focus, research questions, data collection, and analysis process (Holmes, 2020). Hence, the first half of this chapter describes my positionality. The second half describes how these experiences led to the set of research questions guiding this dissertation work.

1.1 Positionality

I have experience volunteering, working, and doing research with families from minoritized communities. For the past 14 years, I have been involved with the Junior Scholars (JS) program (pseudonym), an international non-profit education organization. My experience is centered on two minoritized communities: Los Angeles and San Diego. This program provides middle school students with a supportive group environment with people their age, where they can engage in activities aimed at improving their language abilities, develop a strong moral foundation, and learn to be of service to their community. Each group is assisted by an older youth or an adult as their mentor. During my mentor training I learned that if I truly wanted to support each of these middle school students, I needed to draw on the support of their parents. My experience serving as a mentor in this program cemented my understanding that parental involvement is essential for the education of children in minoritized communities. Additionally, it gave me opportunities to develop relationships with parents through home visits, converse with them about the education of their children, and work together to help their students.

1.1.1 Vignette: Parents Helping Their Children with Mathematics

Through my personal experiences, I know parents can do more than drop off their children at schools or even at tutoring centers, and we (as educators and researchers) can create more opportunities for deeper parental involvement. Two years ago, the JS program started formally offering weekly mathematics tutoring for middle school participants. As mentors, we periodically visited the students and parents and reflected on how both the program and tutoring were going for them. If children were not coming to the tutoring center, we encouraged them to come. Three months ago, two of these parents came to the tutoring center. Unlike other parents

who picked up or dropped off their students, these parents stayed longer and were more involved. I asked them to sit with their children and help them, for example, learn their multiplication tables. They both agreed. As we talked, it was clear they felt welcomed and needed. One of these parents also graciously offered to assist another student with their multiplication tables. After reflecting on the tutoring session and talking about the importance of helping the student practice the multiplication table, the other parent decided to buy multiplication cards to help her daughter at home. For a couple of weeks, both parents came to the tutoring center, updated me on the progress of their children at home, and continued to help their children at the tutoring center. This experience, while not necessarily transformative, showed me that parents can assist with their children's school mathematics if given the chance.

1.1.2 Vignette: Parents Participating in Parent-Teacher Home Visits

My previous career as a teacher also informs my stance and positionality in this study. I worked as a high school teacher at two different Title I charter schools: Nobel Dimension (a pseudonym) in South Central Los Angeles and High Transformative (a pseudonym) in San Diego. I will first reflect on my experience at Nobel Dimension, a charter school that primarily served families from the same minoritized community as the JS Program in Los Angeles. While teaching at Nobel Dimension, I was also finishing my master's degree in education and needed to complete a thesis project. The topic of my thesis was how home visits increased student engagement in the classroom. It was inspired by my involvement in the JS program and my home visits to the families in my group. When I shared that idea with the principal at Nobel Dimension, he told me that no other teacher at school was doing home visits and that I needed special permission to carry them out. Eventually, I was able to home visit two students in my sophomore mathematics class: Rose and Musonda (pseudonyms).

Rose's Family. Visiting Rose's home was an inspiring experience. When Rose was in middle school, she was involved in the JS program, and her family knew me as her mentor. The conversation with her mom revolved around Rose's performance as a student at Nobel Dimension. They appreciated the home visits because they knew I was interested in her academic improvement. This was the first time I went, as a mathematics teacher, to a student's home. We did not talk much about mathematics specifically, but the home visit to my student helped strengthen the relationship between the parents and myself, as a mathematics teacher. For example, Rose felt more comfortable participating in class and asking for assistance, both during and outside of class. Additionally, I felt more comfortable reaching out to Rose's mother if needed. I believe Rose's mom felt the same way.

Musonda's Family. As a teacher, the conversations at Musonda's home were heartwarming and helped me understand her reality better and, therefore, I was able to connect with her beyond mathematics. Musonda was one of the first students to express interest in receiving a home visit. Her family expressed that they appreciated the visits to their home. The conversations with her mother were also not specific to mathematics. Rather, the topics we discussed were related to Musonda's family history, her interests, her career path, and her overall experience at Nobel Dimension. However, the conversation did not shed light on how I could support her as a mathematics teacher. Even though I directly asked how to help her do better in mathematics class, she did not bring up anything specific to mathematics. Instead of saying she had challenges with a specific mathematics concept or challenges accessing curriculum resources, for example, she opted to bring up her general challenge and comfort with working in groups. Regardless, this visit also strengthened my relationship as a mathematics teacher with this family.

High Transformative. Unlike the teachers at Nobel Dimension, the teachers at High Transformative were used to reaching out to parents and meeting them outside of the school. As part of the school structure, teachers had an advisory period during which they were expected to complete home visits or meet the parents outside of the school. This period was aimed at strengthening the relationship between students and teachers; additionally, the administrators encouraged teachers to talk with parents about social and mental wellness. The teachers were seen as individuals whom students and their parents could reach out to and connect with regarding a wide range of subjects related to their students' overall well-being. As a result, my role as mathematics teacher expanded to consider the students' overall well-being.

I observed parents were ready to relate to me as a teacher to discuss their children *in general*, but we did not interact in a substantial way around *mathematics*. These experiences as a mathematics teacher at both Nobel Dimension and High Transformative showed that home visits, or intentional parent-school connections, do strengthen the relationship between the school and the parents. As a teacher, I got to know my students and their families, heard their family stories, and witnessed the parent-child relationships outside of the school. In turn, the parents and students connected with their mathematics teacher through non-mathematics discussions.

Home visits alone, however, are not enough to engage parents in a conversation about the mathematics program at their children's school. One reason might be that parents are traditionally not engaged in conversations regarding the child's overall well-being, let alone regarding the mathematics education of their children. It seemed like more effort and space were needed to engage parents more substantially around mathematics.

1.1.3 Vignette: Parents Participating in Mathematics Education Research

Finally, my experience as a researcher undoubtedly influenced how I viewed the parents' contributions to the mathematics education of students. As part of my research, I had the privilege to interview Latinx and African American parents of students in 6-12 grades. The aim was to understand the parents' perspective of the ambitious mathematics teaching (AMT) program at their children's public school, John Lewis (pseudonym). About 20% of the families at John Lewis spoke Spanish, and my bilingual abilities and Latinx background assisted me in interviewing parents in a comfortable environment. Unlike my experiences with home visits, the interview questions were directly related to the mathematics program. The findings showed three major themes: parents felt largely disconnected from the AMT program, desired more direct parent-teacher communication, and were thinking of ways to strengthen their connections to the AMT program.

In the interviews, parents expressed their very limited understanding or even awareness of the AMT program. One parent, Dulce (pseudonym), mentioned that the only way she knew what mathematics content was covered in class was through the homework her daughter brought home. Below is an excerpt from her interview:

Sometimes... I don't have a lot of knowledge about the programs they offer because I'm not going there 100%. I know a little because my daughters sometimes show me their homework, but I am not very well informed about what they offer in terms of classes. For me, it's a little complicated to tell you... I'm not involved in that. (Dulce, Interview)

In their efforts to connect more to the AMT program, parents often shared difficulty with having direct communication with the mathematics teachers. One parent, Dulce, mentioned that the classroom tutors were more accessible and willing to communicate regarding the AMT program. More direct communication with the teachers was one of the salient suggestions for

strengthening the AMT program. This suggestion came from parents' own experiences with being in direct contact with their children's elementary school teachers. Other suggestions included teachers sending information about the mathematics lessons covered in class so parents can help their children with their school math. The parents mentioned that since it is difficult to help their children, they sometimes must hire tutors to help their children with mathematics.

Parents also expressed feelings of frustration that the structure of the AMT program did not allow for meaningful parental involvement. The school structure should allow and encourage easy parent-teacher communications and collaboration, as parents have a desire to assist their children with their mathematics learning. Additionally, parents need mathematical resources to draw on as they help their children with mathematics at home (Ginsburg et al., 2008). In addition to more parental involvement in the AMT program at home, there could be further opportunities for more direct parental involvement in the AMT program at school. For example, one parent suggested creating spaces where parents can become more familiar with the mathematics curriculum and how teachers facilitate it. If the parents and mathematics program collaborate, the student can have a stronger mathematical experience, both at home and at school.

1.2 How These Experiences Influence This Dissertation Work

We know that although parental involvement is associated with improved academic achievement, stronger student engagement, and more positive attitudes towards school, school structures often limit parental involvement (Mapp et al., 2022; Williams & Sanchez, 2013; Warren, 2005). We also know that schools serving low-income communities, particularly those receiving Title I funding, are required to develop parental involvement plans to foster home-school partnerships (CDE, 2024). However, what we need to know is how meaningful parental

involvement—especially in mathematics—can take shape in middle schools serving minoritized communities, where families often have multiple demands (i.e., inflexible work schedule, transportation barriers, language differences, caregiving responsibilities, challenges accessing school personnel). We also need to know how schools within these communities can position parents intellectually in mathematics education and how parents themselves can define and enact meaningful contributions.

My experiences as a community organizer, a mathematics teacher, and a mathematics education researcher showed that parents possess significant untapped potential to support their children’s mathematical development. Additionally, my professional experiences interacting with parents further cemented my knowledge that parents have knowledge, skills, and abilities that can improve their children's education. Yet established educational systems—schools, tutoring centers, and district initiatives—often limit parental involvement to logistical or supportive tasks rather than intellectual collaboration.

Parental involvement often involves doing non-academic things at school, such as monitoring lunch periods or helping teachers with classroom organization. Although there is value in asking parents to do necessary logistical tasks, limiting parental involvement to such tasks diminishes the intellectual contributions that parents can make to the education of their children. This narrow definition of parental involvement results in a wider parent-school gap in middle school, where parents may already feel distanced from the academic content and school structures. We also know from the literature that parents are often more involved in elementary schools than at the secondary level (Allen & White-Smith, 2018), making middle school a critical site for further research.

The Algebra Project is an example of what can happen when parents from minoritized communities are positioned to contribute intellectually. Robert Moses tapped into his community, organizing experiences to unite parents under the same goal: to extend a quality algebra learning experience to minority students in schools (Moses & Cobb, 2001). The Algebra Project demonstrates that, when schools create opportunities for inclusive spaces for participation and leadership, parental involvement can meaningfully reshape mathematics education.

Researchers have tried to create opportunities for parents to observe mathematics classes, engage in a mathematics conversation with other parents and teachers, develop culturally appropriate lessons, and even facilitate mathematics workshops for other parents (Civil et al., 2003; Civil & Bernier, 2006; Civil et al., 2020; Civil et al., 2021). Organizing this type of parental involvement treats parents as individuals who contribute meaningfully toward the education of their children, regardless of their time or circumstances. Using Civil and colleagues' (2005) asset-based framework and Moll et. al. (1992)'s funds of knowledge, this dissertation investigates how middle schools position parents from minoritized communities regarding mathematics education. Additionally, it amplifies the voices and perspectives of parents regarding effective parental involvement in mathematics education.

To address the above-mentioned gaps in knowledge, I conducted ethnographic research at two Title I schools—a local public middle school and charter school—both serving students from minoritized neighborhoods with which I have deep connections. My goal was to highlight the cultural and intellectual resources that parents draw upon to support the mathematics education of their children. My Latina background and community volunteer work have given me the privilege to become intimately familiar with the reality of families from these minoritized

communities. My bilingual fluency and positionality as an insider and outsider allowed me to cross boundaries within these school and neighborhood communities. This intimate knowledge grounded me in a humanizing approach (Hernandez & Mangual Figueroa, 2022). As a Spanish-speaking Latina, I have developed familiarity with these families through both community engagement and my master's program, which has further strengthened my commitment to a humanizing approach in this research. My dissertation also aligns with the work of other ethnographic researchers who immerse themselves in a social and cultural setting through a systematic ethnographic approach to gain a deeper understanding of the phenomena (i.e., parent-school relationship) (Eckert, 1989; Hutchins, 1995; Williamson, 2017).

The following are the overarching research questions guiding this study:

1. How do teachers, school staff, and administrators (school personnel) in schools that serve mainly culturally and linguistically diverse communities describe their view of parental involvement, both in general education and in mathematics education?
2. How do Latinx and other minoritized parents describe their role in schools that serve culturally and linguistically diverse communities, both in general education and in mathematics education?

This dissertation has six additional chapters. Chapter 2 presents a review of the literature on traditional forms of parental involvement, with particular attention to parental involvement in mathematics education. The research questions are further refined in its conclusion. Chapter 3 describes the research methodology, including the theoretical framework, school selection criteria, and the dissertation timeline. Chapters 4 and 5 present the case studies of the two school

sites, while Chapter 6 describes the cross-case analysis of the findings. Finally, Chapter 7 provides the overall conclusions and implications of the study.

Overall, this study investigated the structures and beliefs that shape parental involvement in school mathematics within minoritized communities. Moreover, it builds on existing literature to reconceptualize and redefine what counts as meaningful contributions from parents toward the mathematics education of their children in these communities.

Chapter 2: Literature Review

This study sought to understand how parents and school personnel describe their view of parental involvement in schools that serve minoritized communities, both overall education and in mathematics specifically. Additionally, this study explores the conversations between parents [and teachers] when parents have opportunities to explore middle school mathematics. Particularly, this study builds on the existing work of educational researchers as they conceptualize a view on parental involvement that is centered on funds of knowledge and the asset-based parental involvement perspective.

The first section defines key terms and phrases that appear in the rest of the chapter. The second section reviews research on traditional forms of parental involvement, followed by a review of issues related to parental involvement in school mathematics. The chapter continues by introducing the two frameworks that my study relies on for the methodology: funds of knowledge from Moll et. al. (1992), and Civil et al. (2005)'s parental involvement in mathematics education framework. Next, the chapter presents a brief section on the federal regulations that public schools within minoritized communities must abide. Lastly, the chapter concludes with the refined research questions guiding this study.

2.1 Key Terms and Phrases

This section defines the key terms and phrases that appear throughout the chapter: parents, parental involvement, and linguistically and culturally diverse neighborhoods. The first term is *parent*. In this study, a parent is any self-identified adult with the power to influence decisions on the student's behalf and has the responsibility to assist the student with their moral,

social, physical, and intellectual needs (Howards & Reynolds, 2008; Mangram & Metz, 2018). Families in minoritized communities often do not fit the traditional nuclear family structure (i.e., two parents of the opposite sex with a small number of children living under one roof). Due to different circumstances, families in these communities might have different individuals fulfilling the role of a parent: a birth parent, legal guardian, caregiver, or an extended family member (Howard et al., 2019; Peressini, 1997).

Educational researchers use a range of terms to describe the relationship between families and schools, including parental involvement, family involvement, parent engagement, parent empowerment, and school–family partnerships (Smith et al., 2011). These terms reflect distinct theoretical orientations toward families and their role in schooling. Some researchers conceptualize the parent–school relationship as largely one-directional, with schools initiating contact and providing structured opportunities for participation (Epstein, 1992). In such frameworks, schools define the terms of involvement. Other researchers promote parent-school partnership models, emphasizing reciprocity, but parents are still bound by a school-defined form of participation (Johnson, 2015; Mapp & Kuttner, 2013). These approaches can unintentionally privilege in-school participation—such as volunteering or attending meetings—while marginalizing culturally grounded and community-based forms of educational support. Other researchers present a more process-oriented and orientation-based perspective, viewing parent-school relationships as a dynamic process where parents draw on their lived experiences and resources to navigate, interpret, or respond to school systems (Barton et al., 2004; Howard & Reynolds, 2008). However, parents are still bound by a school-defined form of participation.

This study builds on these latter approaches while explicitly rejecting deficit frameworks that equate parental presence in school spaces with commitment to children’s education. For this

study, *parental involvement* is defined as any collaboration between parents and schools that supports students' intellectual, moral, social, and emotional well-being (Johnson, 2015). It encompasses a broad range of parent-school collaboration. Although *engagement* has gained prominence in recent scholarship and was introduced in education policy in the 2015 Every Student Succeeds Act (ESSA), this study intentionally uses the term *involvement* (ESSA, 2015) to reconceptualize the term *involvement* rather than abandon it. In this study, involvement includes both traditional and nontraditional practices, occurring within schools, homes, and communities. By broadening what counts as parent involvement, this study recognizes parental agency and positions parents as stakeholders who contribute beyond physical presence at school.

In this study, the phrase *linguistically and culturally diverse neighborhoods* will be used to refer to dense minoritized neighborhoods of a large city where the majority of households share lower socioeconomic and educational indicators (Remillard & Jackson, 2006). These neighborhoods are characterized by a variety of ethnicities, languages, and cultures, which are likened to the contrasting flowers of a beautiful garden. These communities are also characterized by many strengths (i.e., resourcefulness), resilience (i.e., resisting negative messages about themselves), and communal sense (i.e., rallying to support students' learning process) (Lopez & Donovan, 2009; Martin, 2006).

2.2 Parental Involvement Research

Parent and community involvement has been identified as one of the major characteristics of a high-performing school (Henderson & Mapp, 2002). U.S. policies and practitioners rely on parental involvement frameworks to strengthen public education. This section offers a brief review of the literature on traditional forms of parental involvement, followed by an exploration

of two dominant parental involvement frameworks often cited in educational policy, research, and practice. Next follows a critical review of the two dominant frameworks of traditional forms of parental involvement. Lastly, the section concludes with a review of parental involvement in school mathematics specifically.

2.2.1 Dominant Frameworks on Traditional Forms of Parental Involvement

Henderson and Mapp (2002) synthesized 51 research studies on parental involvement, published between 1999 to 2002. One overarching conclusion from the systematic literature review was that across all economic and racial backgrounds, there is a “positive and convincing relationship between family involvement and benefits for students, including improved academic achievement” (Henderson & Mapp, 2002, p. 24). Other major findings included: a) Family’s critical contributions to student achievement from early childhood; b) Importance of parental involvement at home and at school, c) When parents get involved at school, the school gets better, and d) Children do better when the parents are involved in a variety of ways (Henderson & Mapp, 2002). Their findings show how prevalent perceptions of parents and their role in education shape the parent-school relationships (Henderson & Mapp, 2002). These foundational perceptions of parents and their contributions to the education of their children have shaped how researchers and practitioners envision parental involvement should look. Henderson and Mapp (2002) noted that many of the studies in their meta-analysis based their research on Epstein’s (1992) framework, described in the next section.

Dominant frameworks of traditional forms of parental involvement, such as Epstein’s (1992), greatly influence research and practice. These frameworks are based on certain assumptions and views about schools, families, and communities. Some of the assumptions are

the philosophical views of the purpose of education itself. For instance, if public schools are viewed as a tool for American assimilation, any family-school partnership will aim, at its core, to assimilate linguistically and culturally diverse families (Baquedano-Lopez et al., 2013). This parent-school partnership is also based on middle-class American values that shape parental involvement. Hence, family-school frameworks may devalue the social reality of linguistically and culturally diverse families and communities and try to assimilate them into American middle-class values. The values and knowledge of linguistically and culturally diverse communities may also be devalued or ignored (Martin, 2006). Other assumptions of these traditional frameworks are also based on egoistic social values such as individualism and self-centeredness. For instance, many frameworks are school-centered and activity-based (Warren et al., 2009). Schools set the agenda, and parents are often invited to activities, but are seldom asked to articulate their concerns. Hence, all these frameworks position parents and their contributions as secondary to the school's mission.

Under these and other assumptions, dominant frameworks clothe parents' participation under different roles, titles, and descriptions. These prescribed parent roles, however, are based on certain values, assumptions, and views about the parents, schools, and communities. It is important, then, to analyze traditional forms of parental involvement because "even 'strength-based' program models could continue to function within a deficit framework" (Baquedano-López et al., 2013, p. 152). These traditional frameworks have influenced educational policy on parental involvement and have normalized certain views of linguistically and culturally diverse communities. It is important to be familiar with these frameworks and critically analyze how they continue to create unequal power relations in the family-school relationship.

2.2.2 Two Dominant Parental Involvement Frameworks

In this section, I explore opportunities for growth in the two dominant parental involvement frameworks: Epstein's (1992) six types of parental involvement and Mapp and Kuttner's (2013) dual capacity-building framework.

Epstein's (1992) Six Types of Parental Involvement. Since the early 1990s, Epstein's (1992) framework of six types of parental involvement has influenced the design and implementation of the work of many researchers, policymakers, and educators (Epstein et al., 2019; Smith et al., 2011). The framework provides ways to sustain and nurture a family-school-community partnership: 1) parenting assistance, 2) communicating with parents, 3) parent volunteering opportunities, 4) providing parent-student home learning opportunities, 5) including parents in decision-making, and 6) collaborating with the community.

Epstein's (1992) framework describes how schools can nurture the participation of parents. The first type involves schools assisting families with parenting and childbearing skills, and with "setting home conditions that support" students regardless of grade level (Epstein, 2006, p. 40). The second type involves schools setting up effective home-school communication to keep families up to date on students' academic progress and school events. The third type involves schools offering parent volunteering opportunities and outreach strategies to increase family attendance. The fourth type involves schools nurturing home learning opportunities by "offering suggestions and techniques to involve families" (Epstein, 2006, p. 40). The fifth type involves schools including families, such as in parent-teacher association (PTA) meetings, committees, and other parent organizations. The sixth type involves schools connecting families with community resources to provide learning opportunities for the students. Table 2.1 shows a

summary of the different types of parental involvement and gives examples of each (Smith et al., 2011).

Table 2.1: Epstein’s (1992) Six Types of Involvement Framework

Type	Category	Description
Type 1	Parenting assistance	Parenting; childbearing skills; setting home conditions
Type 2	Communication with parents	Up to date on events; effective home-school communication
Type 3	Volunteering opportunities	Modifying existing volunteering opportunities to improve family attendance
Type 4	Learning at home	Suggestions & techniques to involve parents at home
Type 5	Decision-making	Parents as participants in decision-making spaces (i.e., PTA and committees)
Type 6	Collaboration with the community	Coordinating resources so the family-community is more involved in children's development.

Many policymakers and researchers have drawn heavily on Epstein’s (1992) framework, while others criticize it. Many states, for example, require schools to complete the Title I federal funding parent involvement portion using Epstein’s (1992) framework (CDE, 2024). Similarly, many researchers use Epstein’s (1992) framework to analyze the quality of existing family-school partnerships (Lopez & Donovan, 2009). For example, Mapp et al. (2008) used Epstein’s (1992) framework to analyze the value and effectiveness of high-school family centers in bringing together different stakeholders involved in the student’s intellectual development. Smith et al. (2011) used Epstein’s (1992) framework to examine parental involvement in charter schools and to determine whether charter schools draw on new parental involvement practices. They found that charter schools rely on a “parent contract,” requiring parents to fulfill a certain number of hours carrying out traditional forms of parental involvement (Smith et al., 2011).

Other researchers criticize Epstein's framework as individualistic, largely based on school-based parental involvement and middle-class values (Baquedano-López et al., 2013; McCaskie, 2023; Yamauchi et al., 2017). Yamauchi et al. (2017) criticize the limited role that parents play in the parent-school partnership outlined in Epstein's (1992) framework. McCaskie (2023) mentioned that although the framework gives concrete examples of parental involvement, ultimately, it is grounded on a narrow and biased conceptualization of parent-school engagement. Yamauchi et al. (2017) expanded and described the parent-school partnership as one-dimensional, showing that the framework focuses on how parents help their children learn while blaming them for "not taking advantage of the [specific] opportunities provided" by the school (p. 20). In other words, parents are meant to help as the school defines it rather than what parents deem best. Additionally, Yamauchi et al. (2017) argues that Epstein's (1992) framework is not focused on how families, schools, and communities can work together to collectively support the students.

Although Epstein's (1992) framework is centered on the overlapping influence between the home, school, and community, it is not inclusive of linguistically and culturally diverse communities (McCaskie, 2023). The framework fails to explore how race, class, immigration, and power inequalities, among others, shape and affect the lives of families in linguistically and culturally diverse communities. Hence, it runs the risk of participating in these inequalities and "embracing deficit perspectives instead" (Baquedano-López et al., 2013, p. 172). Researchers, then, have recognized the need for a more inclusive parental involvement framework that "honors the ways that ethnically and economically diverse families tend to engage and support their children's education" (Mapp & Kuttner, 2013; McCaskie, 2023, p. 16).

Dual Capacity-Building Framework. Mapp and Kuttner's (2013) dual capacity-building framework is a prevalent culturally responsive framework that tries to address some of the inequalities created by the intersectionality of class and race (Mapp & Kuttner, 2013). Mapp and Kuttner's (2013) framework is centered on equal partnership, meaning that schools and families share responsibility for school improvement and student outcomes. It focuses on building capacity on both sides.

The dual capacity-building framework has four major components (Mapp & Kuttner, 2013). First, it describes the main challenge for ineffective family-school partnerships: the lack of opportunities for schools and families to build capacity for partnerships. Second, it articulates integral conditions for a successful family-school partnership. Third, the framework identifies what should be the capacity goals of family engagement policies and programs at various levels. Fourth, it describes the capacity-building outcomes for schools and families. The framework specifies seven desired capacity-building outcomes for parents: supporters, encouragers, monitors, advocates/activists, decision-makers/choosers, and collaborators (Mapp & Kuttner, 2013).

Following six years of implementation by numerous policy agencies, researchers, and practitioners, Mapp & Bergman (2019) described a new version of the framework. This revision emphasizes the shift from ineffective to effective partnerships from section to section. First, it describes why there is a struggle for a trusting and effective parent-school partnership, acknowledging that there might be historical explanations for building such partnerships. Second, it describes that an essential condition for cultivating and sustaining a trusting parent-school partnership is an asset-based, culturally responsive, and respectful viewpoint. Third, it maintains that the policy and program goals are the "4 Cs": capabilities, connections, confidence,

and cognition (Mapp & Kuttner, 2013, p. 10). Fourth, it splits the outcomes into two categories: 1) describing how parents and school can contribute to each other's capacity to fulfill the partnership goals, and 2) describing the outcome of the school and families fulfilling their partnership goals: improvement of both the students and school. In terms of parent outcomes, two outcomes from the previous version—decision-makers/choosers and collaborators—were grouped into co-creators. As a result, the 2019 version has six family outcomes: co-creators, supporters, encouragers, monitors, advocates, and models. Table 2.2 describes and compares the seven desired capacity-building outcomes for parents from the 2013 version and the six capacity outcomes from the 2019 version.

Table 2.2: Dual Capacity-Building Framework (First and Second Versions) Parent Outcomes

Mapp & Kutner (2013)			Mapp & Bergman (2019)
Outcome	Category	Description	Category
Outcome 1	Supporters	Supporting their children’s intellectual development	Supporters
Outcome 2	Encouragers	Encouraging a positive attitude towards learning	Encouragers
Outcome 3	Monitors	Monitoring how their children spend their time at home	Monitors
Outcome 4	Models	Modeling enthusiasm for education	Models
Outcome 5	Advocate/activists	Advocating for all the children’s education at their children’s school	Advocate
Outcome 6	Decision-makers / choosers	Engaging in decisions to benefit their children and their community	Co-creators
Outcome 7	Collaborators	Collaborating with the school on school improvement issues	

Similar to Epstein’s (1992) framework, some educational federal policies and researchers draw heavily on Mapp and Kuttner’s (2013) framework, while other researchers criticize it. The Title I section of the 2015 ESSA, for example, is shaped by the dual capacity-building framework (Baquedano-Lopez et al., 2013). Some school districts created the Family and Community Outreach Coordinator position to strengthen the parent-teacher partnership (McCaskie, 2023). Yet, this language of “partnership,” as described both in the ESEA and Mapp and Kuttner’s (2013) framework, continues to frame parents as the problem. Mapp and Kuttner’s (2013) framework suggests, for instance, that the home-school partnership has a transformative effect on the education of students, but that schools are not doing enough to engage parents, suggesting parents, especially from culturally and linguistically diverse backgrounds, are not voluntarily engaged (Baquedano-Lopez et al., 2013). Mapp and Kuttner’s (2013) framework not only ignores the social inequalities that parents from linguistically and culturally diverse

communities face, but it also positions them as disengaged and blames them for their students' low academic performances, suggesting this is due to their disengagement.

2.2.3 Ignoring Social Injustices and Acknowledging Non-Traditional Forms of Parental Involvement

Both Epstein's (1992) and Mapp and Kuttner's (2013; 2019) frameworks explored above envision a positive family-school relationship. However, both are rooted in fundamental stereotypes about the role of parents, particularly from linguistically and culturally diverse communities. Applying these frameworks, which do not consider the social inequities and injustices faced by linguistically and culturally diverse communities, runs the risk of further contributing to such injustice. Additionally, parental involvement through these traditional frameworks normalizes certain practices that ignore non-traditional practices of parental involvement engaged by parents from linguistically and culturally diverse communities.

Ignoring Social Injustices. Dominant parental involvement frameworks fail to adequately account for the social inequalities and injustices that exist in linguistically and culturally diverse communities. Although there are many injustices (i.e., race, class, gender, immigration, sexual orientation, religion, and education), research often analyzes the injustices caused by the intersection of race, class, and immigration. First, race affects who has control of resources, access, and power in the parent-school relationship (Chapman et al., 2018; Chapman & Bhopal, 2013; Martin, 2006). Second, class is a major factor in determining access to educational opportunities and social capital. Lastly, the immigration status of parents influences how they engage in school and their community (Cuevas, 2021). These inequalities manifest in the daily lifestyle of families in linguistically and culturally diverse communities: multiple jobs,

time poverty, inflexible work schedules, childcare arrangements, and limited transportation (Howard et al, 2019). The traditional school (i.e., volunteering or joining school governance) and home-based parent activities (i.e., assisting with homework) are based on the reality of economically privileged middle-class families, rather than linguistically and culturally diverse communities (Allen & White-Smith, 2018; Smith et al., 2011). Most of these traditional activities require certain social and economic privileges that may not be available to families in linguistically and culturally diverse neighborhoods (William & Sanchez, 2013).

Power differentials, for example, are an inequality created by the intersection of race, class, and immigration that prevents parent-teacher collaborations (Quintos et al., 2024; Warren, 2005). Some teachers and administrators perceive parents from linguistically and culturally diverse communities as lacking the status, education, or social (and political) capital needed to collaborate as equals (Kinser-Traut & Turner, 2020; Sablan & Tierney, 2014; Warren, 2005). In a study that took place in an elementary school in a linguistically and culturally diverse community, a parent questioned why teachers were not sharing information: “Why do they think it is not necessary to share information with me? I, as a parent, have that right” (Quintos et al., 2019, p. 179). In another study examining the parental involvement practices of poor working-class mothers, parents expressed how the “poor and unresponsive relationships with teachers” excluded their children from “academic opportunities and important educational information” (Allen & White-Smith, 2018, p. 18). These studies indicate that the power dynamic in the parent-teacher relationship can severely limit a parent’s contributions.

Acknowledging Non-Traditional Forms of Parental Involvement. Traditional views on parental involvement act as barriers preventing schools from “learning about, with, and from [linguistically and culturally diverse] families and communities” (Johnson, 2015, p. 1). An

example of a non-traditional form of parental involvement is parents' participation in grassroots initiatives, or collaborating with non-profit and community-based organizations (Jasis & Ordóñez-Jasis, 2004). Such collaborations address the power and structural inequalities and foster parent leadership "to build a group of parents who can exert influence together" (Warren et al., 2009, p. 2242). For example, Jasis and Ordóñez-Jasis (2004) describe a collaboration between a group of low-income Latinx immigrant parents and a community organization at a public middle school. This group of parents, who named themselves *La Familia* (The Family), wanted to create an inclusive space for other immigrant parents. The community organization shared its organizing experience and technical assistance with *La Familia*. Hence, *La Familia* organized various events to discuss the well-being of their students with various stakeholders. They organized, for example, frequent well-attended parent meetings and periodic meetings with mathematics and science teachers to address the underrepresentation of Latinx students in advanced courses. As a result of these forms of non-traditional parental involvement, *La Familia* had a positive influence on the education of Latinx students both at the district's middle school and high school.

Drawing on community organizing powers is one of the many non-traditional forms of parental involvement strategies from parents in linguistically and culturally diverse communities (Mediratta et al., 2002). There are many other possibilities for parental involvement when "community stakeholders are creative about how they might attend to the needs and interests of the people they serve" (Mangram & Metz, 2018, p. 291). However, creativity is lost when there is a predefined way for parents to be involved. Recognizing, acknowledging, and embracing non-traditional forms of parental involvement can strengthen the parent-school relationship in linguistically and culturally diverse communities. Through conversations with the parents

themselves, school personnel can learn about these non-traditional practices. Jasis and Ordoñez-Jasis (2012) carried out a study with three community- and school-based parent participation projects with parents from linguistically and culturally diverse communities. They found that formal and informal means of parent organizing can increase the level and quality of Latinx parental involvement in schools.

Summary. Dominant frameworks, such as the two described above, normalize certain views and practices toward parents from linguistically and culturally diverse communities. These frameworks are school-centric and ignore the various social injustices and inequalities faced by parents from linguistically and culturally diverse communities (Warren et al., 2009). These frameworks maintain the power dynamics between families and schools, favoring goals set by the school, knowledge recognized by the school, and parental involvement practices recognized by the school (Chapman et al., 2018). When parents and their contributions do not prescribe to those norms set by the school, their involvement is described and viewed as unengaged, uninterested, or even incapable of contributing (Kinser-Traut & Turner, 2020). These views shape deficit parental involvement frameworks, which in turn shape educational policy and practice, which in turn shape the culture of parental involvement in linguistically and culturally diverse communities.

2.2.4 Parental Involvement in Mathematics Education

Parental involvement in mathematics policies is also influenced by dominant parental involvement frameworks (Lopez & Donovan, 2009; Peressini, 1998). The generalized and vague language used to define the parent-school relationships positions parents with a limited role in supporting mathematics programs (Howard et al., 2019; Lopez & Donovan, 2009). For example,

since parents are viewed as recipients of information, they are only included in the mathematics policies to elicit school support (Peressini, 1998). Traditional forms of parental involvement in mathematics education rarely draw on parents' interest or skills in mathematics education (Peressini, 1997; Warren et al., 2009).

The inequalities and injustices faced by parents from linguistically and culturally diverse communities also influence how parents advocate for the mathematics education of their students. Class, for instance, plays a major role in the direction of mathematics policies and key stakeholders in their implementation. California, specifically, has a rich history of middle-class parents influencing the implementation or rejection of equity-focused K-12 mathematics policies (Klein, 2002; Peressini, 1997; Peressini, 1998; Schoenfeld, 2014). Parents draw on resources and networks to elicit support for their goals, including mathematicians, state legislators, university professors, former California State Board of Education members, to resist equity-focused mathematics reforms (Schoenfeld, 2014). As an example, an organized group of parents in San Francisco fought the district's mathematics policies of delaying Algebra I in 8th grade (Aleksey, 2023).

Linguistically and culturally diverse communities also have different resources and methods that parents use to advocate for the mathematics education of their students due to their social reality. Their efforts range from school-based Parent Teacher Association (PTA) parent groups and family math nights organized by researchers and teachers to collaboration with local community-based organizations (CBOs) (Lopez & Donovan, 2009; Woods, 2023). In the last decade, one area of research interest has been parental involvement in mathematics education in linguistically and culturally diverse communities.

Challenging the normalized views and perceptions of parents from linguistically and culturally diverse communities can nurture asset-based parental involvement practices in mathematics education in these communities (Civil et al., 2005). Creating frameworks around the educational goals of the parents, rather than school-centric goals, can shift the culture of parental involvement. Researchers have recently engaged in transformative work aimed at strengthening, for example, a mathematics learning partnership between parents in linguistically and culturally diverse communities and mathematics teachers (Quintos et al., 2019; Quintos et al., 2024; Warren, 2005). While researchers emphasize the importance of families supporting children's mathematical learning, few researchers have focused on analyzing what roles parents have and how they can participate in the process of learning (Peressini, 1998). Even fewer studies focus on the intersection of parental involvement, mathematics education, social class, and these communities (Civil et al., 2003).

A Large Contribution to Mathematics Education Research. Civil and colleagues (2005) have made one of the most significant recent contributions to research on parental involvement in linguistically and culturally diverse communities. Building on more than 20 years of work, they focused on the intersection of mathematics teaching and learning, culture, and language within working-class Mexican American communities in southern Arizona (Civil, 2018). For example, Civil (2001) brought together parents from a working-class neighborhood in *talleres matemáticos* (mathematics workshops), where they engaged in discussions of mathematics through activities such as *papel picado* (Mexican paper banners) tasks. Extending this work, Civil (2018) highlights the importance of integrating students' funds of knowledge as resources for mathematics teaching and learning. More recently, Civil et al. (2021) facilitated a two-way dialogue with eight Mexican American mothers in a Latinx community, engaging them

in a mathematical modeling task and co-developing related activities for their children. This body of research emphasizes the need to reconceptualize the roles of working-class Mexican American mothers as active contributors to their children's mathematical learning.

A central argument across these studies is the establishment of two-way dialogue between parents and schools, allowing for a shared exploration of mathematics and its applications in everyday life (Civil, 2001). In this reciprocal relationship, teachers and parents learn from and teach one another, fostering mutual respect and a sense of *confianza* (trust), which is essential for meaningful collaboration. Such an approach positions parents from linguistically and culturally diverse communities as intellectual resources with valuable knowledge to support their children's mathematical learning (Civil & Andrade, 2002; Civil et al., 2021; Quintos et al., 2024; Gutierrez et al., 2024). Indeed, this emphasis on reciprocal engagement is a defining feature across much of Civil's work (Civil, 2001; Civil 2018; Civil et al., 2021).

Why It Matters. Parental involvement in mathematics education in culturally and linguistically diverse schools is important because it can influence their children's persistence and success in their studies (Anhalt et al., 2002). Engaging Latinx parents, for example, in their children's mathematics education, both at home and at school, has the potential to improve their children's achievement in mathematics (Anhalt et al., 2002; Knapp et al., 2017). The perceived lack of parent engagement in these communities is not a mark of a deficit of students or a community; rather, it is a reality that results from structural inequalities and inequitable access to resources.

Despite the potential for parental involvement to transform schools, most parental involvement efforts in culturally and linguistically diverse neighborhoods happen at the elementary school level (Anhalt et al., 2002; Peressini, 1997). At the elementary level, parents have more opportunities to be involved with their children's classrooms. Research shows that parents in culturally and linguistically diverse communities find it harder to be involved or stay as involved when their children transition to middle school or high school (Allen & White-Smith, 2018). Some researchers have carried out promising work with parents at the middle school level: carrying out parent middle school classroom observations; organizing middle school parent mathematical workshops (Anhalt et al., 2002; Civil, 2001; Civil et al., 2003; Díez-Palomar et al., 2011). However, the foundational middle school and high school structures and bureaucratic functions might make parents feel unwelcome or isolated in the long run (Allen & White-Smith, 2018). More research on these school structures could be beneficial to explore the foundational obstacles to parental involvement at the middle school level.

Through traditional and nontraditional forms of involvement, and through both intrinsic practices (e.g., fostering positive attitudes toward mathematics and encouraging persistence) and extrinsic practices (e.g., communicating with teachers, and providing academic support), parents can positively influence their middle school and high school students' mathematics achievement (Howard et al., 2019). Parental involvement in middle school and high school influences students' mathematical achievement (Anhalt et al., 2002; Joseph et al., 2017). For example, a group of Latinx immigrant parents organized *convivencias* (get-togethers) for parents and “discovered together their power to change and improve their children's [mathematics] schooling” at their middle school in the San Francisco Bay Area (Jasis and Ordonez-Jasis, 2004, p. 35). The more that parents are involved in the student's schooling at higher grade levels, the

more likely these students achieve academic success and continue to higher mathematics courses.

2.3 The Two Frameworks Guiding This Study

This section introduces the two theoretical frameworks guiding this study: funds of knowledge from Moll et al. (1992) and the parents as intellectual resources framework from Civil and colleagues (2005).

2.3.1 Funds of Knowledge for Teaching Framework

Moll et al. (1992) define funds of knowledge as “historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and wellbeing” (p. 133). A funds of knowledge approach combats “deficit perspectives of culturally and linguistically diverse students and families” (Quintos et al., 2024, p. 2). It does so with “The recognition that funds of knowledge exist in all households,” and this recognition “has been critical in re-conceptualizing households as repositories of resources that can be strategically tapped to foster education, rather than as the source of barriers to educational attainment” (González, 1995, p. 4).

Educators and researchers can learn about families’ funds of knowledge (i.e., their experiences, knowledge, and practices) through household visits (Civil et al., 2020). In these visits, educators and researchers can learn “aspects of the socio-political and economic context of the households” and the “social history of the households, their origins” as well as the “labor history of the families, which reveals the accumulated bodies of knowledge of the household”

(Moll et al., 1992, p. 133). Since this knowledge can be broad and diverse, Figure 2.1, below, adapted from Moll et al. (1992), shows examples of families' funds of knowledge.

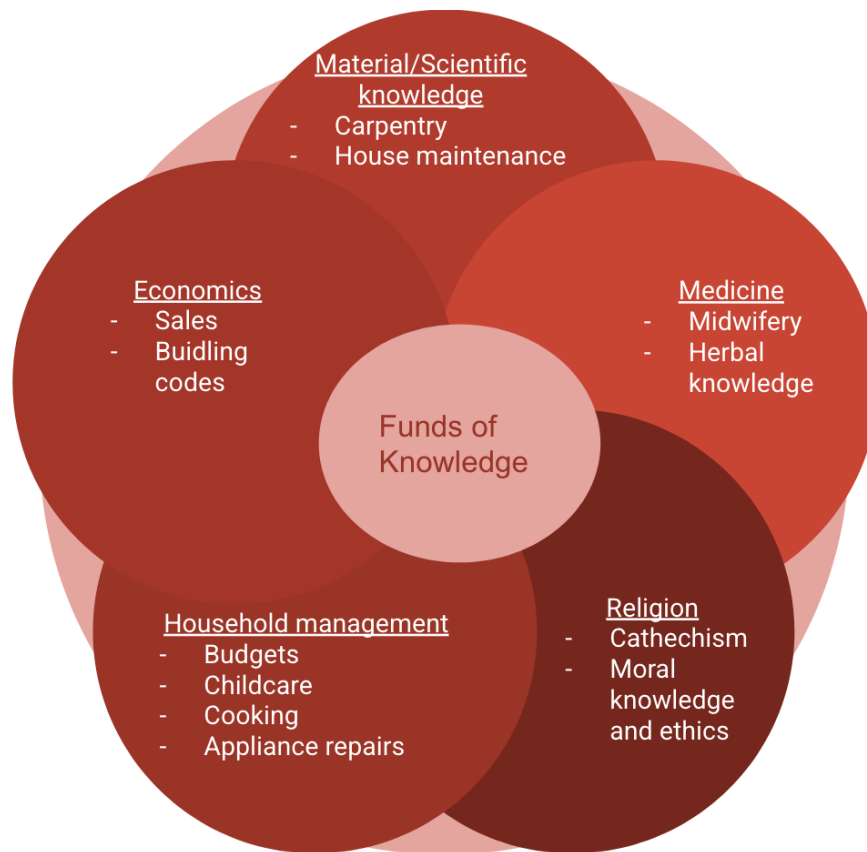


Figure 2.1: Example of a Family's Funds of Knowledge. This image is adapted from *Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms* by Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). *Theory Into Practice*, 31(2), 132–141. <https://doi.org/10.1080/00405849209543534>

Teachers and administrators often do not notice their students' and families' funds of knowledge (Stoehr et al., 2022). However, when educators view parents and their communities as valuable resources and leverage those resources in classroom teaching, there is potential for improving the educational quality of students (Stoehr & Civil, 2022). Educators and administrators should “learn about and from [families’] funds of knowledge and build on them for the advancement of students in school” (Civil, 2018, p. 34). For students from linguistically

and culturally diverse communities, this “potential for student learning could far outweigh textbook or mainstream instruction” (Stoehr & Civil, 2022, p. 369).

The parent-educator relationship is a vehicle through which educators can draw on the families’ funds of knowledge to help the students. For example, researchers have shown how parents use their knowledge of working with wrenches to work on activities involving ordering fractions; other researchers were working with mothers to create mathematical tasks related to proportions that build on the mothers’ experiences making tamales (Civil et al., 2020). Other researchers noted how Latinx parents draw on their day-to-day experience with ladders to understand the concept of slope (Díez-Palomar et al., 2011). Through these experiences, a new conceptualization of an approach to parental involvement, centered on families’ funds of knowledge, emerges: one that empowers parents and positions them as resources that both teachers and students can draw on.

2.3.2 Parental Involvement Framework

The parental involvement framework used to guide this research project came from the Math and Parent Partners (MAPPS) project, a widespread effort for parental involvement in mathematics education (Civil & Bernier, 2006). This NSF-funded project had three foundational principles: 1) raising awareness of parents’ mathematics learning and teaching; 2) viewing parents as active learners who can increase their knowledge through hands-on group activities; and 3) creating learning opportunities where everyone contributes equally, knowledge is co-constructed, and learning occurs through dialogic processes. Parents, mainly low-income Mexican mothers, were involved in various ways, including attending mini-courses about fundamental mathematical concepts, facilitating mathematics awareness workshops, and

participating in leadership teams at schools. Through these various forms of involvement, Civil et al (2005) redefined the role of parents from Latinx backgrounds in mathematics education. Parents are seen as intellectual resources in four ways: parents as parents, parents as learners, parents as teachers, and parents as leaders (Civil et al., 2005; Civil & Bernier, 2006). Table 2.3, below, shows the description of each category.

Table 2.3: Civil et al (2005)'s Parents as an Intellectual Resources Framework

Category	Description (with examples)
Parents as parents	Parents helping their children with school mathematics or anything related to their mathematics education Examples: finding tutors, talking to mathematics teachers
Parents as learners	Parents engaging in the learning of mathematics themselves Examples: parents participating in mathematics workshops
Parents as teachers	Parents facilitating mathematics learning for other parents Examples: facilitating mathematics workshops at school
Parents as leaders	Parents advocating for a better mathematics education for the children in the district Examples: parents going to district meetings to speak on behalf of their interests.

Parents as Parents. The first category of viewing parents as intellectual resources is seeing parents as resourceful individuals who can help their children with mathematics (Civil et al., 2005). Parents are first and foremost interested in supporting their children with their mathematics work and finding resources to help their children continue their education. However, Latinx parents meet obstacles in trying to fulfill such goals. Yet, when parents are viewed as intellectual resources, their perspective on how their children learn mathematics matters. In the context of MAPPS, parents were invited to share their perspectives about their role as parents in their children's education through *tertulias*, (get-togethers) with other parents (Quintos et al., 2019, p. 171). Understanding parents' perspectives is the first step toward

identifying and removing barriers to effective parental involvement in mathematics. During the *tertulias*, parents identified two barriers encountered in their efforts: teachers disregarding or belittling parents' mathematical support, and the school's unwillingness and unreadiness to listen to and respond to parents' voices and participation.

When parents are viewed as intellectual resources to help children with mathematics, opportunities are created for parents to share their perspectives, as parents, on the mathematics program at school. As part of the MAPPS project, for example, a group of Latinx parents carried out classroom observations in what was termed a *reform mathematics classroom*, or classrooms using problem-based learning teaching strategies (Anhalt et al., 2002; Civil & Quintos, 2009). Parents appreciated how the teacher facilitated problem-solving and provided opportunities for students to communicate their mathematical ideas. When parents are viewed as intellectual resources, they not only reflect on how to provide better support at home, but also how to support the school's mathematics program (Civil & Andrade, 2003).

Parents as Learners. The second category of Civil's parents as intellectual resources is viewing parents as learners of mathematics, interested in exploring the mathematical concepts that their children are covering in school (Civil et al., 2005). Parents can participate in mini-courses on different arithmetic, geometric, or algebraic concepts (Civil et al., 2020; Knapp et al., 2017). Researchers have noted that these participating parents were better equipped to assist their children at home and increased their own children's motivation to learn mathematics in the classroom (Knapp et al., 2017).

Viewing and respecting Latinx parents as learners of mathematics requires certain fundamental qualities and attitudes. One essential attitude is the importance of drawing on their

funds of knowledge to increase parents' sense of empowerment and true dignity (Civil et al., 2020). For example, a group of Latina mothers were engaged in creating a realistic model for creating paper flowers to decorate a wall at the school (Civil et al, 2021). This task was created because the researchers knew the mothers involved had knowledge of making paper flowers and were also involved in the school community. Parents enthusiastically engaged in mathematical learning and then used their acquired mathematics skills to assist their children at home.

Parents as Teachers. The third category of Civil's parents as intellectual resources views parents as teachers of mathematics, facilitating mathematics workshops for other parents (Civil et al., 2005). The MAPPS project formed facilitating teams composed of teachers and parents who planned workshops for other teachers and parents. These workshops covered elementary and middle school mathematical concepts, such as proportional reasoning and area of circles (Civil & Bernier, 2006). Such innovative experiences challenged existing power dynamics because they drew on and valued families' funds of knowledge. As they participated as teachers in these workshops, they felt their contributions and perspectives were more valued and respected; in turn, the teachers also learned to view parents as collaborators and equals. Parents as teachers of mathematics is a "powerful framework for parents to experience, especially working-class/language/ethnic 'minority' parents," as it presents a "more powerful form of parental participation" (Civil & Bernier, 2006, p. 328). Parents value and are eager to support new and empowering approaches toward parental involvement (Civil et al., 2005).

Parents as Leaders. The last category of Civil's parents as intellectual resources views parents as leaders of mathematics education in their children's school (Civil et al., 2005). Parents want their children to receive a good education (Lopez & Donovan, 2009); with the appropriate support, parents can also lead the mathematics education of other Latinx children in their

children's school (Lopez & Donovan, 2009; Jasis & Ordonez-Jasis, 2004). As part of MAPPS, parents took various leadership roles in the project, including facilitating parent sessions or mentoring facilitation teams composed of parents and teachers (Civil et al., 2005). Although the schools reverted to teachers facilitating and leading these sessions, rather than parents, the parent participants in MAPPS raised their consciousness of their critical role in the education of their children.

When parents are viewed as and view themselves as leaders of mathematics education, they become educational partners (Anhalt et al., 2002; Lopez & Donovan, 2009; Martin, 2006). A group of parents, with the assistance of a non-profit organization, can collaborate with schools and introduce school policies, such as improving after-school tutoring and holding regular meetings between parents and teachers (Jasis & Ordonez-Jasis, 2004). With sustained efforts, these parents can contribute to the success of students from culturally and linguistically diverse communities in higher-level mathematics and science classes and by being named as a member of the school's honors roll.

2.4 Federal Regulations for Parental Involvement in Public Educational Institutions

Often, schools in linguistically and culturally diverse communities are classified as Title I schools, which are schools that receive federal supplemental financial assistance to help their communities meet state academic standards (CDE, 2024). Under the Elementary and Secondary Education Act, public schools receiving Title I federal funding, which includes both charter schools and neighborhood public schools, are required to have a parental involvement program that is "planned and implemented with meaningful consultation with parents of participating children" (CDE, 2024a, para. 1). Particularly, all schools receiving Title I funding are required to

develop a shared parent-school responsibility plan, and encouraged to build capacity for parental involvement (CDE, 2024a).

As part of a shared parent-school responsibility, schools receiving Title I funding should develop, jointly with parents, a written policy regarding parental involvement. This jointly developed policy, termed the *school-parent compact*, should outline how “the parents, the entire school personnel, and students will share the responsibility for improved student academic achievement” and “build and develop a partnership to help children achieve the State’s high standards” (CDE, 2024a, School-Parent Compact Section). Schools are expected to conduct annual meetings with parents to evaluate the effectiveness of the parental involvement program at school; identify barriers to greater parent participation, especially from minoritized groups; and use such findings to design more effective parental involvement programs. In terms of ongoing parent-teacher communication, at minimum, these schools are required to 1) hold parent-teacher conferences to discuss the children's achievement, 2) send home reports on the children’s academic progress, 3) provide reasonable access to personnel as well as volunteer, observe, or participate in the classroom, and 4) ensure a two-way parent-school communication in a common language if practicable.

The *Title I, Part A Parent and Family Engagement* policy includes suggestions, which are not listed as requirements, for different parental involvement strategies to build capacity for an effective parent-school partnership (CDE, 2024a). Some of these suggestions include:

- educating school personnel on how to work with parents as equal educational partners and on the value and utility of the parents’ contributions;
- maximize parental involvement and participation through in-home parent-teacher conferences;
- involve parents in professional development opportunities for teachers and principals;

- train parents to work with other parents and enhance the parental involvement program;
 - to eliminate and financially cover all logistical barriers for more parent participation; and
 - provide materials and training to help parents work with their children.
- (CDE, 2024a)

Researchers, federal laws, and regulations all speak to the importance of enhancing parental involvement to improve the intellectual education of students, particularly in linguistically and culturally diverse communities. Much work is needed to learn about parental involvement practices that can elicit meaningful contributions from parents within these communities. As this work advances, building capacity for meaningful parental involvement from linguistically and culturally diverse communities will shift these strategies from the suggested to the required section for Title I funded schools.

2.5 This Research Study

This research study contributes to the concerted effort of researchers such as Civil et al (2005) to nurture asset-based perspectives toward parental involvement from culturally and linguistically diverse communities, particularly Latinx parents in middle school mathematics. I use an ethnographic research approach to understand parental involvement in two schools in an urban area of Southern California that serve Latinx communities. Particularly, I view the parents as intellectual resources to explore the following research questions at two local schools:

1. How do school personnel in schools that serve mainly culturally and linguistically diverse communities describe their view of parental involvement, both in general education and in mathematics education?

- a. From their perspective, how are Latinx and other minoritized parents responding to schools' parental involvement plans to build and sustain parental involvement, both in general education and in mathematics education?
 - b. From their perspective, what funds of knowledge do Latinx and other minoritized parents draw on for academic parental involvement both in general and in mathematics education?
2. How do Latinx and other minoritized parents describe their role in schools that serve culturally and linguistically diverse communities, both in general education and in mathematics education?
- a. From their perspective, how are Latinx and other minoritized parents responding to the school's parental involvement plans, both in general education and in mathematics education?
 - b. From their perspective, what are Latinx and other minoritized parents' hopes for their involvement in education, both generally and in mathematics education?
 - c. From their perspective, how are Latinx and other minoritized parents drawing on their funds of knowledge for their children's academic support, both in general education and in mathematics education?

By describing their view, in RQ1, I explore how school personnel make sense of the current state of parental involvement practices in their schools. Additionally, by describing their

roles in RQ2, I clarify how parents make sense of the current structures for parental involvement, and what their hopes and aspirations are these structures and their achievement. RQ1 focuses on understanding the school's vision and application of its parental involvement plans, and sheds light on the affordances and limitations of the school's parental involvement plan. RQ2 centers parents' voices and addresses the need for parents to share their opinions. Answering these questions, through the lens of parents as intellectual resources, will expand knowledge about the affordances and limitations of current parental involvement practices in middle schools in linguistically and culturally diverse communities, what contributions teachers and parents can make, and what each of them hopes their contribution looks like (Civil et al., 2005).

Chapter 3: Methods

This study describes the landscape of parental involvement in mathematics education, what structures exist to support parental involvement, and how parents respond to those structures. Additionally, it analyzes parents' comprehension of parental involvement, particularly in mathematics education. For maximum variation sampling, I compared a public school and a charter school in a local school district, both of which serve a large percentage of Latinx students from culturally and linguistically diverse communities (Patton, 2005). I used an ethnographic approach for data collection and a qualitative thematic approach for the analysis process. The data collected included school documents; interviews with key educational stakeholders, including parents and school personnel; and ethnographic observations. As described in Chapter 2, the term *parent* means any self-identified adult with the power to influence decisions on the student's behalf and who is responsible for assisting them with their moral, social, physical, and intellectual needs (Howards & Reynolds, 2008; Mangram & Metz, 2018).

This chapter describes the conceptual framework and the methods used in this study. The first section describes the theoretical framework and its relation to the methods of the study. The second section describes the critical ethnographic research stance and its implications for setting and school selection. The chapter ends with data collection, the data analysis process, and a discussion of steps taken to address the trustworthiness of this study's findings.

3.1 Theoretical Framework

The theoretical framework of this study leverages concepts from two conceptual bodies of knowledge: funds of knowledge and parental involvement, both presented in Chapter 2, but

restated in this chapter. This study explores how the learning process is mediated by social and cultural tools and how schools and teachers sometimes do not acknowledge the funds of knowledge accessible to parents and families in culturally and linguistically diverse communities. Hence, this section explains how Moll's (1992) Funds of Knowledge framework can strengthen school-home connections and improve students' mathematics learning process. From the parental involvement perspective, this section draws from Civil and colleagues' (2003) asset-based perspective towards Latinx parents as intellectual resources and the parents' key role in helping their students with mathematics (Civil & Andrade, 2003). Viewing parents from an asset-based perspective opens many doors and opportunities and broadens the practices of parental involvement in mathematics education.

3.1.1 Viewing Funds of Knowledge as Cultural Tools

Vygotsky describes the learning process as the interaction between the processes in the “intermental plane” (the processes occurring between two people) and the resulting processes in the “intramental plane” (occurring within an individual), interacting to “construct knowledge” (Culligan, 2013, p. 3). This construction of knowledge is facilitated through “cultural tools” that have been “socially evolved and ... organized” (Culligan, 2013, p. 6; Walshaw, 2016). In other words, social and cultural tools mediate the learning process. Having access to and learning to use all cultural tools at their disposal, then, can help students reach their “individual higher mental functioning” (Culligan, 2013, p. 6).

All learning processes, including the mathematics learning process, are mediated by social and cultural tools. In the learning of mathematics, students have access to two sources of cultural tools: the cultural tools introduced by their teachers and the cultural tools they draw on

during their everyday lives. For example, to solve a problem about the proportion of ingredients for cooking, teachers might encourage students to work out the algorithm by either using traditional paper and pencil or by using a calculator to divide. Parents from culturally and linguistically diverse communities, on the other hand, might use a different set of cultural tools to teach proportions. They might prefer to work out these problems based on estimation and their own experience (Civil et al., 2020). They might recall, for example, how many tamales can be made with half pound of masa, and will then use estimation to solve problems involving proportions (e.g., how much masa is required to make 50 tamales for a holiday party?). They might also prefer to use another algorithm altogether, such as one learned in their home country.

Mathematics teachers draw on a wide range of cultural tools to help their students construct knowledge (i.e., algorithms, mathematical writing, or mental/physical manipulatives). (Culligan, 2013; Pugh, 2017). Widening the reach to include cultural tools that parents are acquainted with can be even more helpful for the students (Pugh, 2017). However, the school mathematics system may or may not recognize the cultural tools of linguistically and culturally diverse students. The teachers and school can even ignore, or worse, pathologize, these cultural tools. In school settings, the cultural tools that are valued are often those that come from the school, and not from the home (Quintos et al., 2019). Teachers will rarely draw on parents' contributions, and, as a result, students start to devalue their families' knowledge and contributions. This should not be the case. The families' funds of knowledge, the "historically accumulated and culturally developed bodies of knowledge and skills," are an equally valid set of cultural tools essential for the student's mathematical learning process (Moll et al., 1992, p. 133). Viewing the families' funds of knowledge as cultural tools, and valuing their mathematical potential, can engage minoritized students in meaningful learning opportunities and strengthen

their mathematical learning process (Civil & Bernier, 2006; Stoehr & Civil, 2022). By bringing together the collective cultural tools and resources within the home and school, the parent-teacher collaboration can strengthen the mathematics learning process (Quintos et al., 2019; Quintos et al., 2024).

3.1.2 Viewing Parents from Culturally and Linguistically Diverse Communities as Intellectual Resources

This study also draws on Civil and colleagues' asset-based perspective toward Latinx parents as intellectual resources (Civil et al., 2005; Quintos et al., 2019). Researchers have explored the equity issues related to parental involvement in culturally and linguistically diverse communities. When viewed from an asset-based perspective, research has shown that parents can be intellectual resources who assist and influence the mathematics education of not only their children but potentially other children in their community (Civil et al., 2005; Civil, 2018).

Viewing culturally and linguistically diverse parents as intellectual resources enables new learning opportunities for students and teachers. Researchers have gathered groups of parents to discuss the teaching and learning of mathematics for their children (Civil & Quintos, 2009; Civil et al., 2020; Stoehr et al., 2022). Others have engaged parents in mathematics workshops or in mathematical modeling tasks with teachers (Civil et al., 2003; Civil et al., 2021). Additionally, researchers have engaged parents in family math nights to explore mathematical tasks with their students or in workshops to discuss the challenges of parental involvement with teachers and administrators (Civil & Bernier, 2006; Jacobbe et al., 2012; Quintos et al., 2019; Quintos et al., 2024). In short, when parents are viewed from an asset-based perspective and treated with

respect, educators and researchers have found creative learning opportunities for meaningful parental involvement in mathematics education.

3.1.3 How Theoretical Basis Shapes Research Questions

The research questions guiding this study are based on the theoretical frameworks described above. Parents are the first educators of their children. The government views parental involvement as essential, which is why schools are required by law and regulations to have structures in place to engage with parents (CDE, 2024a). Two of the sub-research questions analyze the cultural tools that parents draw on to help their children with their mathematics learning: RQ1-B captured the parents' funds of knowledge from the school personnel's perspective; RQ2-C captured parents' funds of knowledge from the parents' perspective. From the asset-based parental involvement framework, parents from culturally and linguistically diverse communities are seen as intellectual resources for mathematics education (Civil et. al., 2005). RQ1-A captured the school personnel's perspectives on parental involvement, RQ2-A captured how the parents perceive their parental involvement, and lastly, RQ2-B captured how parents envision what future parental involvement in mathematics education might look like. Table 3.1 summarizes the relationship between the research question and the conceptual framework mentioned above.

Table 3.1: Relationship Between Research Questions (RQ) and the Conceptual Framework

	Theoretical basis	Aim of sub research-questions (RQ):
RQ - 1	How teachers, school personnel, and administrators describe their view of parental involvement, both in general education and in mathematics education	
RQ1 - A	Asset-Based Parental Involvement	The teachers', school personnel's, and administrators' perspectives on parental involvement
RQ 1 - B	Sociocultural Perspective	What teachers and administrators say regarding how parents draw on their cultural tools (i.e., funds of knowledge) to help their children with mathematics learning
RQ - 2	How parents describe their role in school, both in general education and in mathematics education	
RQ 2 - A	Asset-Based Parental Involvement	How the parents perceive their own parental involvement
RQ 2 - B	Asset-Based Parental Involvement	How parents envision parental involvement in general education and in mathematics education could look like
RQ 2 - C	Sociocultural Perspective	What parents say regarding how they draw on their cultural tools (i.e., funds of knowledge) to help their children with mathematics learning

3.1.4 Critical Ethnographic Research Approach

An ethnographic research approach, developing a thorough description through an extensive data collection process, is at the center of the three bodies of knowledge that give shape to the theoretical framework of this study (i.e., Funds of Knowledge and parent involvement) (Civil et al., 2005; Creswell, 2013; Moll et al., 1992). Other researchers have also historically explored critical mathematics with adults through ethnographic research (Ackland, 2014). This study used a critical ethnography approach to respond to the marginalization of Latinx parents in mathematics education (Creswell, 2013). I aimed to empower parents by “giving them more authority, challenging the status quo, and addressing concerns about power

and control” as they engage in the mathematics education of their children (Creswell, 2013, p. 93). Guided by Civil’s framework of parents as intellectual resources for mathematics education, I engaged in ethnographic work with Latinx parents to challenge the status quo that their role and their families’ funds of knowledge are not recognized by schools and school systems to strengthen the mathematics education of their children.

Based on my research positionality and my experience as a teacher, researcher, and community organizer, I understand the importance of collaborating with, working with, and interacting with parents while maintaining respect, professionalism, and *confianza* (trust) (Civil, 2001). My experience in research and community organizing as a Spanish-speaking Latina facilitated respect and building *confianza* with Latinx parents. My experience led to building professional relationships with Latinx parents connected to or associated with various local public schools. These relationships helped me negotiate access to the research setting.

3.2 Selection Criteria

Criteria for site selection were based on two factors: purposeful sampling and existing relationships (Cresswell, 2013; Patton, 2005). The first criterion for site selection was based on purposeful sampling for maximum variation (heterogeneity) (Patton, 2005). Maximum variation sampling captures central themes across variation. Analyzing parental involvement at a charter school and a public school yielded two kinds of findings. The first kind was a “high-quality, detailed description” of the unique affordances and limitations of parental involvement at each site (Patton, 2005, p. 235). The second was the “important shared patterns that cut across” and “emerged out of the heterogeneity” of comparing parental involvement of Latinx parents at each site (Patton, 2005, p. 235).

By design, a neighborhood public school and a region-wide charter school are two different school settings. Public schools are held accountable to all regulations set by the local district. Within a given district, students are automatically enrolled in their neighborhood's public schools. If parents do not want their children to go to the neighborhood's public schools, they can enroll their children in charter schools or other "choice" options. Charter schools are also public schools, but they operate under a school district contract, a *charter*, that frees them from many of the district obligations if they continue to show academic and financial results (Blazer, 2010). Charter schools are not required, for example, to follow the district's educational philosophy or its parental involvement approach. In this study, the different approaches to parental involvement became manifest in how the charter school's parental involvement practices differed from the district's practices.

The second criterion for site selection was built on existing relationships with key informants at local schools (Cresswell, 2013). Such relationships build on trust and ease the process of carrying out extensive fieldwork and data collection for the critical ethnographic approach (Cresswell, 2013). As a researcher, I was involved in an ongoing research project to understand the nature of the mathematics department at a charter school in the district. Through this existing research, the university had established relationships with the charter school's mathematics department. Additionally, as a community member, I had established a relationship with a neighborhood's middle school through an ongoing collaboration aimed at strengthening the academic achievement of the students and strengthening their parental involvement program.

For this study, I chose the charter school connected to the research project and the public school connected to the community work. These existing relationships with both the charter school and the neighborhood public school helped strengthen trust with parents, which was an

important element, especially when working with Latinx parents during a politically volatile time (Civil, 2001; Quintos et al., 2024; Stoehr & Civil, 2022; Stoehr et al., 2022).

This research work took place in two school sites that serve linguistically and culturally diverse communities in the San Miguel Unified School District (SMUSD) (pseudonym). One was a charter school, Pacific School (pseudonym), and the other was a neighborhood public school, Magnolia Middle School (pseudonym). Pacific School is an ethnically diverse 6-12 charter school connected to the local Darwin University (DU) (pseudonym). To attend Pacific School, students go through a selective application and lottery process. Prospective students meet the following criteria: 1) come from low-income families, and 2) have no parents who graduated from college. Most students at Pacific are Latinx, African American, and Asian, living across multiple neighborhoods in the city. Pacific's mission is to increase the number of students attending DU from linguistically and culturally diverse communities. The school is widely known for its academic accomplishments, including being one of the top-performing charter schools at the district and state levels, and even receiving national-level recognition. The school identified community volunteers, parent engagement, and continuous teacher support for the same group of students and their parents from grades 6-12 as factors in its success.

Magnolia Middle School (Magnolia Middle) is a neighborhood public school part of the SMUSD that provides education for students in grades 6-8. Following the feeder pattern of the district, eight elementary school attendance boundaries feed into Magnolia Middle. The attendance boundaries of Magnolia Middle include a diversity of race, ethnicity, and socioeconomic status. Even though the neighborhood near the school includes houses affordable only to middle-class and upper-middle-class families, most upper-middle-class parents opt to send their children elsewhere. Many of the students who attend Magnolia Middle are Latinx, African

American, and Asian from the linguistically and culturally diverse neighborhoods nearby. Unlike Pacific School, Magnolia Middle is not recognized for student academic achievement. On the contrary, student test performance is worse than the district's average and worse than the state's performance. As part of the school district requirements, Magnolia Middle lists parental involvement as an instructional strategy to enhance student performance. The school is also required by the district to include parents in decision-making at the school site. Figure 3.1, below, compares the demographics, socioeconomic status, and academic performance of Magnolia Middle and Pacific School.

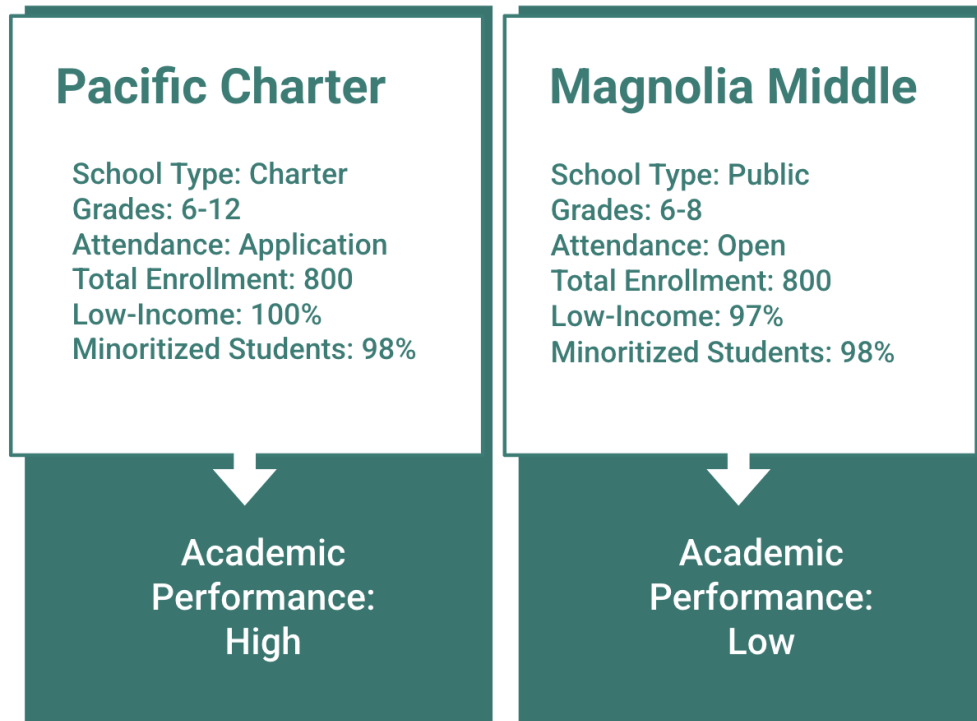


Figure 3.1: Data Comparison of the Two School Sites

3.3 Study Timeline

This study used qualitative methods (Miles et al., 2019). The pilot study phase laid the groundwork for this study. The data collection phase took place during Fall 2024. Interviews, documents, and ethnographic field notes were collected during this time. The data analysis phase occurred during Spring 2025, beginning as soon as data was collected. Although writing happened throughout the data collection and analysis phase, most of the writing took place between the Fall 2025 and Spring 2026 semesters. This dissertation timeline is shown below in Table 3.2.

Table 3.2: Summary of Dissertation Timeline

Summer 2024	September 2024	October 2024	November 2024	Spring 2025	Fall 2025 - Spring 2026
Data collection phase:			Data analysis phase:		
Recruiting participants	Interviews, documents, and field visits	Interviews, field visits	field visits		Data analysis & writing

3.3.1 Pilot Phase

The pilot phase included background research on the two sites and the pilot study. I collected information from both schools pertaining to parental involvement. Key documents included: the Accrediting Commission for Schools, the Western Association of Schools and Colleges (ACS WASC) accreditation report, the Local Control and Accountability Plan (LCAP) documents, and the English Learner Advisory Committee (ELAC) reports. Additional information was also collected through school and district websites. This data provided an overall perspective on the schools' action plans to build and sustain parental involvement and the resources necessary to meet those goals. It also allowed me to familiarize myself with the school site before fieldwork.

The pilot phase enabled me to prepare and practice conducting and analyzing interview data. It also included the completion of the interview protocols. I conducted a pilot test of the parent interview protocol to determine if the questions were working correctly and I made necessary adjustments before the actual interviews (Maxwell, 2013). I also conducted a pilot test of the school personnel and parent interview protocols to assess if the questions performed as intended, and made necessary changes (Maxwell, 2013). These modifications to the interview protocols were made before data collection. Both protocols—before and after modification—are

added as an appendix (Appendix A and B). The Spanish parent interview protocol is also included (Appendix C).

3.3.2 Data Collection Phase

Most of the data collection phase took place throughout Fall 2024, which allowed for data collection to happen during critical moments of school-parent relationships formation and strengthening. Figure 3.2 shows the timeline for data collection: interviews, documents, and field visits.

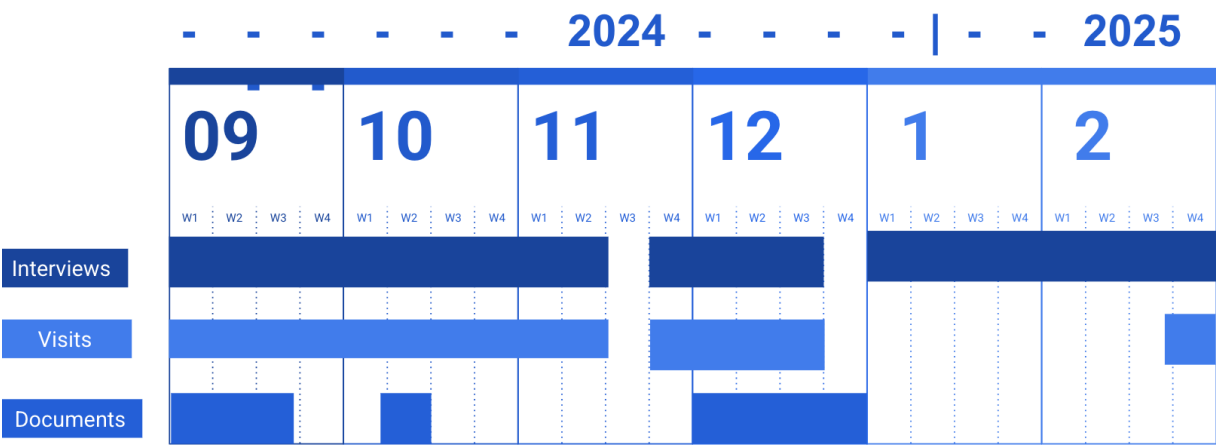


Figure 3.2: Timeline for Data Collection

Documents. The collection of important school reports and documents was necessary to understand the schools’ visions regarding parental involvement; hence, it continued after the pilot phase. Additional information was collected through school and district websites. I collected any department-level, school-level, or district-level document that described the schools’ models for parent involvement or a description of their parent involvement plans. These documents provided, as mandated by the district, a written school model for parental involvement that aspires to be equitable and inclusive, and that tries to meaningfully engage

culturally and linguistically diverse parents. The documents themselves were not coded as the ethnographic visits or the interviews; rather, I created a summary of each document and included the summary in the overall description of the schools' models for parental involvement in their respective chapters.

Ethnographic Visits. In addition to gathering informal contextual information, I carried out field visits that helped forge relationships with key individuals at the school who work with parents (for example, the school personnel, the parent coordinator, and even parents themselves). Additionally, these visits shed light on the culture of forging and strengthening parent-school relationships. I attended key events, such as Parent Teacher Association (PTA) meetings and back-to-school nights, observed front-desk parent visits, and spent time with the site parent coordinator. When permission was granted, I attended parent-teacher conferences with mathematics teachers. I sought out events organized by the school to strengthen the parent-school relationship. These ethnographic visits offered context for the relationship between the school and the parents, provided contextual information on how parents were perceived by school personnel, the nature of the spaces with the parents, and the resources the parents drew on for mathematics support. During Fall 2024, my goal was to attend at least two major events each month at each school site.

Ethnographic visits were carried out to enrich and provide context for the different interviews (Maxwell, 2013). These ethnographic visits helped me to gather informal contextual information not collected through the interviews. I recorded this data in a field journal using jottings, keywords, or phrases regarding key events (Emerson et al., 2011). A few factors guided the jottings process (Emerson et al., 2011). I took notes of first impressions, including physical settings or characteristics of people involved. I wrote down key events, others' reactions to them,

and their expressed perspectives and concerns. I was systematic in taking these notes, focused on routine actions, how the visits were organized, and searching for variations and exceptions. I tried to avoid generalizations or summaries and tried to capture details showing people's behaviors, including direct quotes, gestures, and facial expressions. In short, I privileged the individual's "'insider' descriptions and categories" over my own view (Emerson et al., 2011, p. 159). These jottings were turned into typed field notes within a few days of the key event. The field notes included a "detailed, accurate, and comprehensive account of what has been experienced" (Emerson et al., 2011, p. 338).

Interviews with School Personnel. The data collection process involved interviews with a variety of school personnel. Civil et al. 's (2005) framework of parents as intellectual resources shaped the interview protocols to analyze how school personnel perceive parents. The interviews included questions about the different events, structures, and partnerships to build and sustain parental involvement at school. It also included questions regarding school personnel's perspectives and knowledge of different activities for parents in the community. Interviews with the administration, faculty, and school personnel highlighted the school's vision and mission to build and sustain parental involvement, the affordances and limitations of current structures and partnerships in place. The interview protocol questions can be found in Appendix A. I expected these interviews to lead to practical applications of the school's model for parental involvement, as described in the school's documents, both in general and for mathematics education.

The number of interviews and the individuals interviewed were deliberately chosen to provide information relevant to the research questions that are harder to gain from other participants (Maxwell, 2013). I interviewed administrators to understand the overview of the school's model for parental involvement; parent coordinators to understand how the school

model is being applied; and mathematics teachers to understand how parents are involved in mathematics education at school. I interviewed at least one individual within each category. All interviews were audio-recorded, and participants were given gift cards for their time.

Interviews with Parents. An important data collection point was the parent interviews because it helped to answer the second research question: understanding how parents describe their view of their role in schools, both in general education and in mathematics education. Through these interviews, the parents voiced their perspectives on the affordances and limitations of current structures and shared ideas on additional structures they found helpful. The questions revolved around the four categories outlined in Civil et al (2005)'s framework of viewing parents as parents, learners, teachers, and leaders. Furthermore, a section of the interview asked about different parent activities in their community and the participants' role in them, further extending Civil et al.'s (2005) framework category of parents as intellectual resources. Appendix B contains the parent interview protocol. Since most of the interviews were in Spanish, Appendix C offers the Spanish translation of the interview protocol.

To recruit parents for the interviews, I relied on three sources: the parent coordinators, the mathematics teachers, and the ethnographic visits. I contacted the parent coordinators at both sites and asked them to connect me with interested parents. Additionally, I reached out to the mathematics teachers I interviewed at each school to connect me with the parents of their students. Lastly, I asked parents I met through my ethnographic visits if they were interested in participating.

It was vital to select parents of varied demographics and shared realities. At Magnolia Middle, I tried to select parents who lived in the linguistically and culturally diverse

neighborhood where the school is located, for example, over parents living in a more affluent area. This was not possible; hence, while I had hoped for greater economic diversity, ultimately, I selected a group of parents who expressed interest.

There is no one-size-fits-all description for parents in linguistically and culturally diverse communities. Therefore, in the next chapters, I provide as many details as the parents shared, without overstepping the bounds of trust and preserving participants' privacy. In doing so, I recognize and acknowledge the diversity in the community, and exercise mutual trust and respect between parent participants and myself as a researcher. I anticipated that the parents would share how they have helped their children with their learning of mathematics, how the parents have been involved in school, and the affordances and constraints of current school structures to enhance parental involvement. I aimed to interview five to 10 parents per school to capture diverse perspectives from the parents. All 20 interviews were audio-recorded, and participants were given gift cards for their time.

3.3.3 Data Analysis Phase

Data analysis began as data was collected, but most of the data analysis took place during Spring and Summer 2025 using a qualitative thematic (inductive and deductive) analysis approach (Kuckartz, 2019). Most of the writing and dissemination occurred in Fall 2025 and Spring 2026.

Qualitative Thematic Analysis. The data was analyzed using Kuckartz's (2019) six-phase thematic analysis approach: 1) prepare data, 2) form categories based on interview questions, 3) code data with main categories, 4) form sub-categories inductively, 5) category-based analysis, and 6) reporting and documentation. For this study, I modified Kuckartz's

method and terminology. Figure 3.3 shows the overview of the 6-phase qualitative thematic analysis approach used in this study.

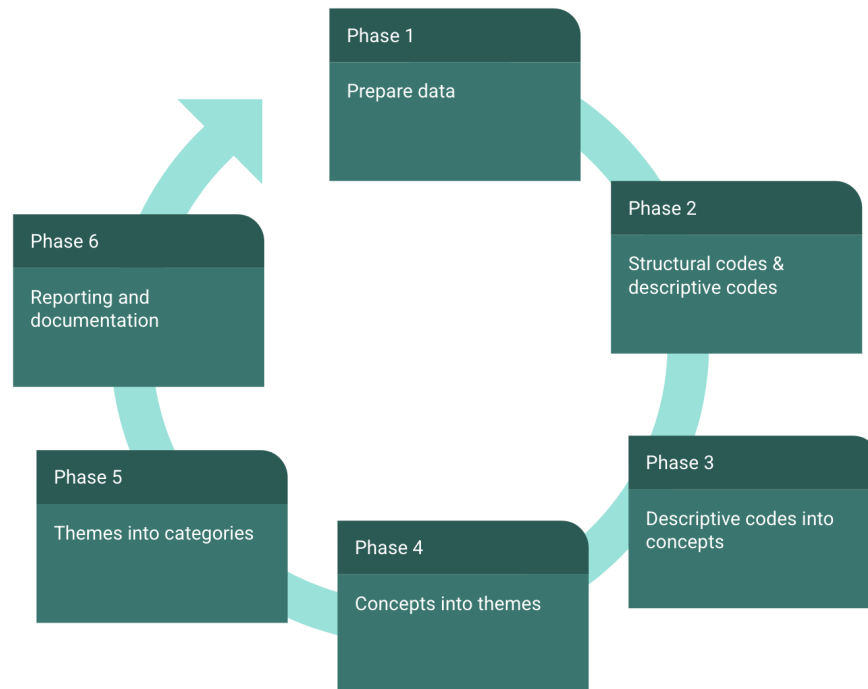


Figure 3.3: Six-Phase Thematic Analysis Approach

First Phase. The first phase of the analysis included preparing and summarizing the data. I completed an initial reading of all the data. All recorded interviews were sent for automatic transcriptions (Rev, 2024). The data transcripts were transferred to MaxQDA, a qualitative analysis software (VERBI Software, 2024). I also created a summary of each interview transcript. Using MaxQDA to analyze the data was helpful as the software allows the user to analyze the data using codes, document variables, and memos without altering the original text. During this phase, I also wrote, summarized, and uploaded full ethnographic visit notes.

Second Phase. The second phase of the analysis included creating both structural codes and open codes for the interview data (Kuckartz, 2014). Structural codes are codes that are

“based solely on the empirical data” (Kuckartz, 2014, p. 55). These codes were applied to interview data based on the questions asked in the interview. Each interview protocol was divided into two sections: views on parental involvement and views on funds of knowledge. Structural codes helped with organizing, paraphrasing, generalizing, and abstracting the data according to the questions asked in the interview. During the analysis, these codes also helped to easily reference data.

During phase 2, a descriptive code was also applied to each unit of analysis in the data. Descriptive codes were a short phrase that captures the phenomena of the unit of analysis (Strauss and Corbin, 1990). It was the main idea of the three to four lines that capture the “specific occurrence, incident, or other phenomena” regarding parental involvement or funds of knowledge (Kuckartz, 2014, p. 23). The descriptive codes were the first step of the open coding process that allows the researcher to “investigate, compare, conceptualize and categorize data” (Kuckartz, 2014, p. 23). I went line-by-line, segment by segment, applying descriptive codes to each unit of analysis by answering guiding questions such as: “What phenomenon is addressed? Who plays a role in the phenomenon? Which aspects of the phenomenon are (not) addressed? When does the phenomenon happen and for how long? or What is the purpose?” (Kuckartz, 2014, p. 27). Examples of short phrases included: “parents monitor homework,” “parents share mental strategies,” “work schedule conflicts with school events,” or “available bilingual school personnel.”

Similarly, the unit of analysis for my field visit notes was an episode, or a block of the topic in the conversation (i.e, introductions, mathematics task 1, discussion of mathematics task 1). The descriptive codes from the school interviews and field visits formed the basis for answering RQ1. The descriptive codes from the parent interviews and field visits formed the

basis for answering RQ2. Table 3.3 summarizes the connection between applying descriptive codes to the data and its relation to the research questions of this study.

Table 3.3: Connection Between Descriptive Codes and Research Questions

	RQ1	RQ2
School personnel interviews	x	
Parent interviews		x
Field visits	x	x

Third Phase. The third phase of the analysis involved consolidating descriptive codes into concepts. Similar descriptive codes of each data source were consolidated into concepts, a short phrase that captured the main thought of similar descriptive codes (Miles et al., 2019). Figure 3.4, below, gives a concrete example of this process. Descriptive codes related to parents hiring tutors or parents drawing on tutoring services were consolidated under a related concept: parents drawing on outside professional or paid resources for academic support. This phase was the first step towards drawing general conclusions about the data collected (e.g., if parents feel the need to hire tutors, then they may not be satisfied with the quality of academic support from the school).

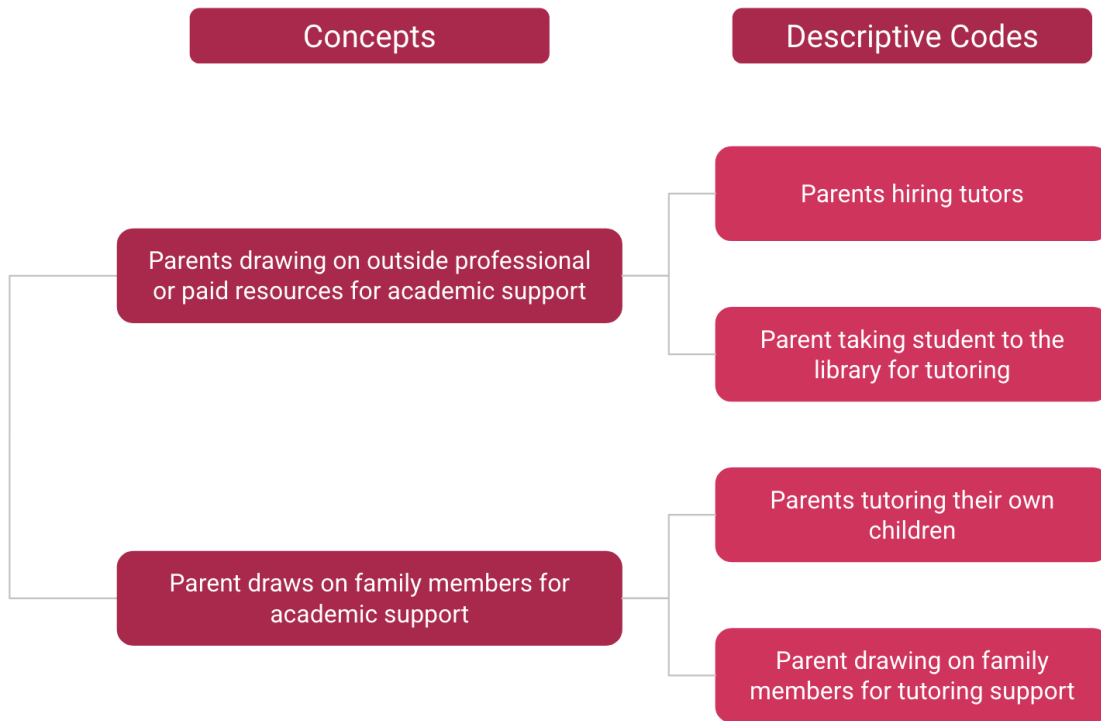


Figure 3.4: Phase 3 (Descriptive Codes to Concepts)

The concepts created from the descriptive codes in the interviews were used to help answer RQ1: how school personnel describe their view of parental involvement, both in general education and in mathematics education. The concepts from the descriptive codes in the field visits regarding the school personnel's descriptions of their views on parental involvement were added to this group. The concepts created from descriptive codes in the parent interviews were used to answer the second research question. The concepts from the descriptive codes in the field visits regarding parents' views on parental involvement were added to this group.

Fourth Phase. in this phase, similar concepts were consolidated into themes, a short phrase that captured the main idea of a group of concepts (Miles et al., 2019). Figure 3.5 gives an example of grouping similar concepts (parents finding the necessary academic support for their children) into themes.

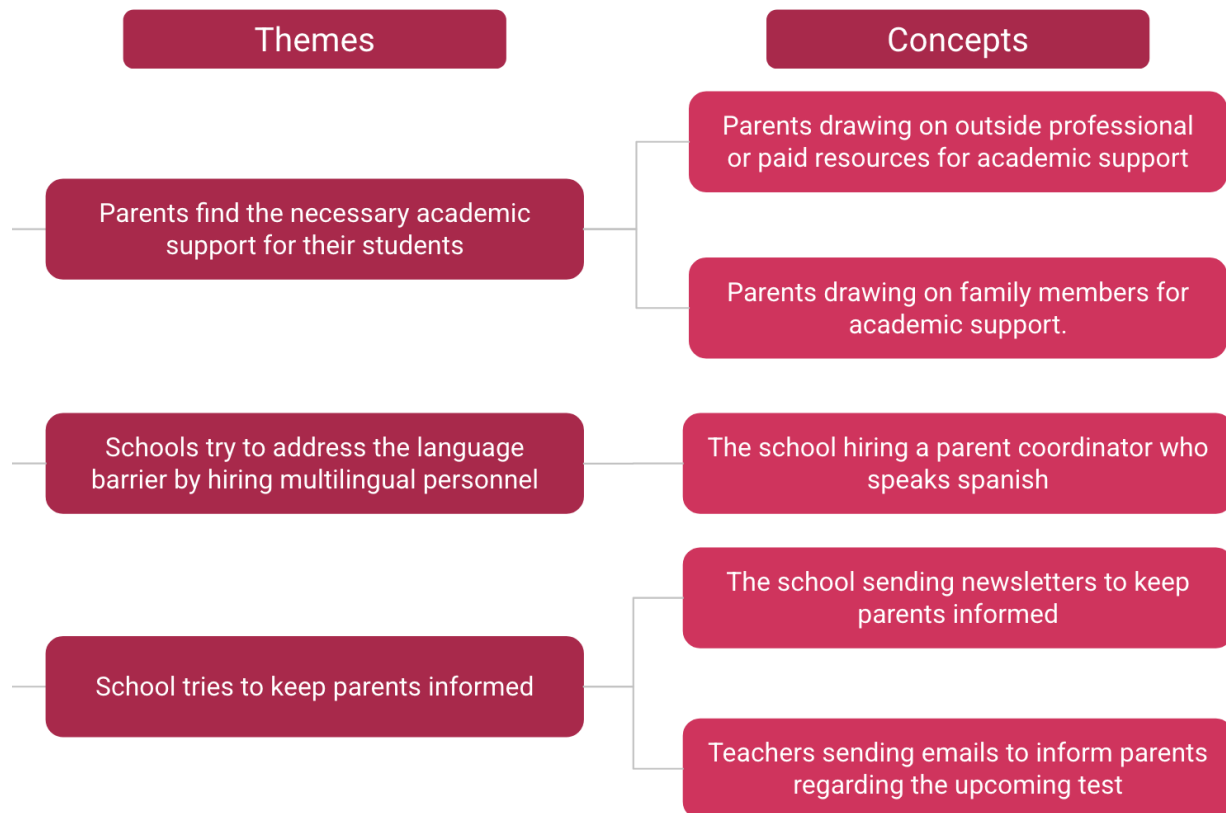


Figure 3.5: Phase 4 (Concepts to Themes)

Fifth Phase. The fifth phase included connecting the themes from the fourth phase to the parents as intellectual resources framework, or to funds of knowledge (Civil et al., 2005; Kuckartz, 2019; Moll et al., 1992). Applying, conceptualizing, and specifying the role of parents, based on the parents as intellectual resources framework, gave shape to how parental involvement in mathematics education looked in the two sites. The fifth phase of the analysis applied or expanded on prior research. That is, categorizing similar themes found in the fourth phase under a category from the framework of parents as intellectual resources helped expand and visualize how parents can take the role of parents, learners, teachers, and leaders in two new educational contexts. Figure 3.6 shows examples of how the themes were connected to one of the categories of Civil’s framework. For example, if a theme identified in the fourth phase resembled

parents finding tutors or helping their child with their school math, that theme was connected to the category of parents as parents. If a theme identified was related to parents expressing a desire to learn mathematics to help their children better, it was connected to the category of parents as learners (Civil et al., 2005).

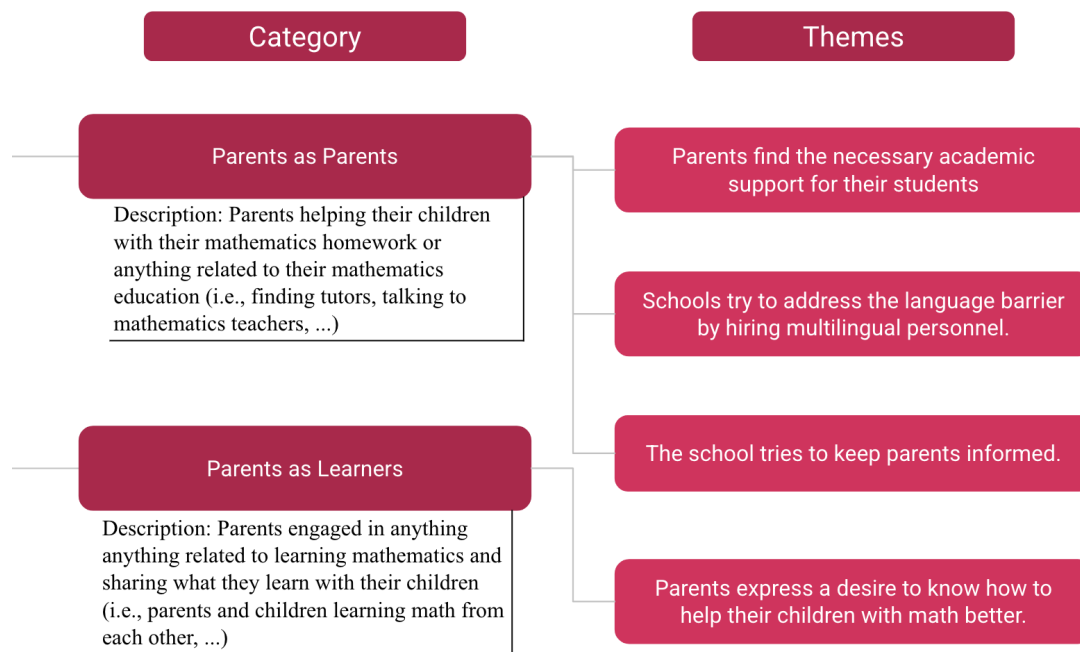


Figure 3.6: Phase 5 (Connecting Themes to the Framework)

Additionally, the objective of the fifth phase was to conceptualize and specify the funds of knowledge that parents drew on to help their children with mathematics (Moll et al., 1992). Categorizing similar themes found in the fourth phase under a category from the funds of knowledge helped expand and visualize how parents, in two new educational settings, drew on their funds of knowledge to help their students with their mathematical learning. Figure 3.7 shows examples of how the themes from the fourth phase were connected to a type of funds of knowledge.

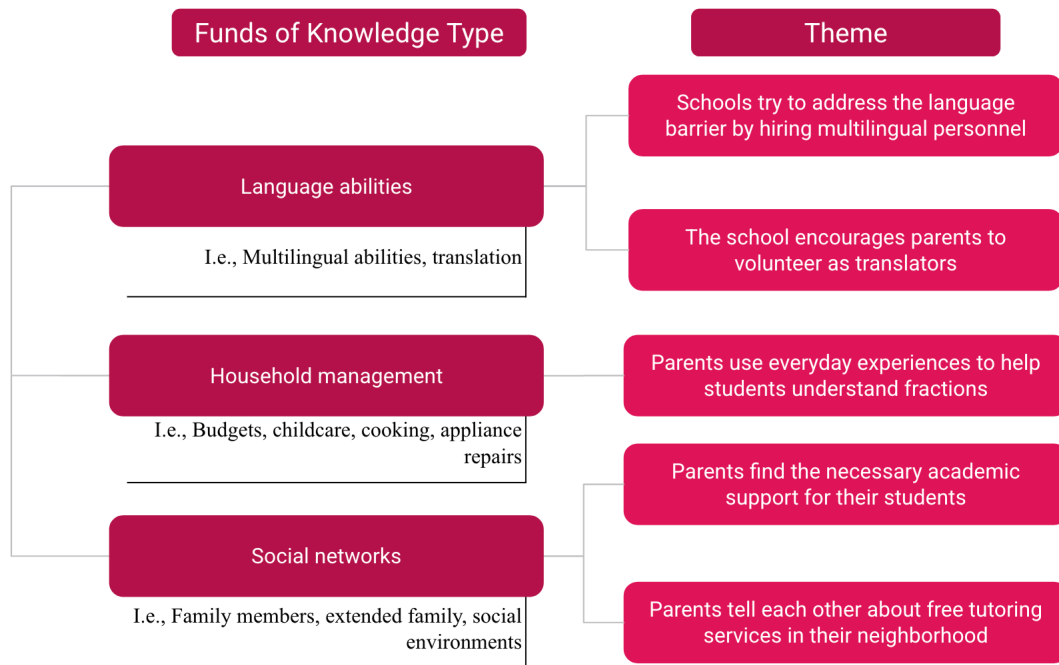


Figure 3.7: Phase 5 (Themes and Funds of Knowledge)

Sixth Phase. The sixth phase consisted of reporting and documenting findings based on the parent categories and funds of knowledge identified. As stated in the second phase, the descriptive codes from each data source were connected to specific research questions. Hence, the corresponding concepts and themes found in the third and fourth phases were also grouped based on each data source. The corresponding parent categories and funds of knowledge identified in the fifth phase were already grouped based on which research question they are addressing. These sets of descriptive codes—concepts, themes, and categories—made it possible to report and document findings more easily.

From the interviews with school personnel and field visits (related to administrators’ and teachers’ perspectives of the role of parents), the parent categories found in the fifth phase addressed research question RQ1-A, and the funds of knowledge categories found in the fifth phase addressed RQ1-B. This analysis helped document findings for the first research question.

From the interviews with parents and field visits (related to parents' perspectives of the role of parents), the parent categories found in the fifth phase addressed RQ2-A and RQ2-B; the funds of knowledge categories found in the fifth phase addressed RQ2-C. This analysis helped document the findings for the second research question. Table 3.4 shows the relationship between reporting the findings in phase six for each sub-research question. Table 3.5 then summarizes the relationship between the research questions, the sub-questions, the data collection, and the data analysis process.

Table 3.4: Relationship Between Data Sources, Phases 2-6, and Research Questions

Data sources	Phases 2-4	Phase 5	Phase 6	Research question
Interviews with school personnel, field visits	descriptive codes	Civil's framework	RQ1-A	RQ1
	--> concepts			
	--> themes	Funds of knowledge	RQ1-B	
Parent interviews, field visits		Civil's framework	RQ2-A	RQ2
	descriptive codes			
	--> concepts	Civil's framework	RQ2-B	
	--> themes	Funds of knowledge	RQ2-C	

Table 3.5: Relationship Between Research Questions, Data Collection, and Data Analysis

	Research questions (RQ)	Data sources	Analysis
	RQ1: How do school personnel describe their view of parental involvement, both in general education and in mathematics education		
RQ1-A	From their perspective, how are parents responding to current structures to build and sustain parental involvement, both in general education and in mathematics education?	Document School Personnel Interviews	Thematic analysis
RQ1-B	From their perspective, what funds of knowledge do the parents draw on for academic parental involvement and in mathematics education?	Document School Personnel Interviews	Thematic analysis
	RQ2: How do parents describe their roles in school, both in general education and in mathematics education		
RQ2-A	From their perspective, how are parents responding to the school's parental involvement plans, both in general education and in mathematics education?	Parent interviews Ethnographic field visits	Thematic analysis
RQ2-B	From their perspective, what are parents' hopes for parental involvement, both in general education and in mathematics education?	Parent interviews Ethnographic field visits	Thematic analysis
RQ2-C	From their perspective, how are parents drawing on their funds of knowledge for their children's academic support, both in general education and in mathematics education?	Parent interviews Ethnographic field visits	Thematic analysis

3.4 Validity and Potential Biases

I minimized biases using various strategies. First, I used triangulation. I collected data from various individuals and settings using various methods: document collection, interviews, and ethnographic visits. The various methods and data sources were purposefully chosen to reduce the risks of biases and capture a more complete picture of parental involvement at each school (Maxwell, 2013). I gathered significant ethnographic notes using a consistent note-taking format. Second, there was a two-month data collection period for ethnographic notes. My

sustained presence as a researcher in the schools helped me develop productive working relationships with local informants and develop more grounded insights (Maxwell, 2013). Third, I included rich interview data using semi-structured interview protocols. All 20 interviews were transcribed verbatim to provide a full and detailed picture of what happened during the interview.

To ensure that my conclusions and interpretations of the participants were not misinterpreted, I also sought respondent validation in the form of member checks. I contacted each participant and shared with them the summary of their interview. This was done to identify any biases or misunderstandings of what they shared in the interview (Maxwell, 2013). Based on their feedback, I made modifications to the summary as needed. Lastly, I checked in regularly with my dissertation advisor and other committee members. This ensured trustworthiness and validity and helped me identify personal biases in the data analysis process.

3.5 Presentation of the Following Chapters

The findings chapters are organized to guide the reader through an in-depth exploration of each case study, followed by a cross-case analysis. Findings are organized using the stacking comparable cases strategy (Miles et al., 2019). Chapters 4 and 5 focus on Magnolia Middle School and Pacific Charter School, respectively, examining each case individually to present its unique context. These chapters draw on school documents, interview data, and insights from ethnographic observations to portray each setting in detail. Chapter 6 then brings the two cases together in a cross-case analysis, highlighting key themes and points of comparison.

Chapter 4: The Case of Magnolia Middle School

Chapter 4 explores the case of Magnolia Middle School. The findings for the case of Pacific School are presented in Chapter 5. Then, Chapter 6 highlights point of comparison between both school sites through a cross-case analysis.

Magnolia Middle School is part of the local district and serves grades 6-8. According to the school's documents, Magnolia Middle School's mission is to nurture independent learners who will embrace learning and who will flourish in their lives, college, and careers. The school personnel draw on equitable and restorative practices to fulfill both their vision and mission. Restorative practices are relation-building strategies to nurture a positive whole school that leads to “the promotion of alternative and multilevel methods of managing behavioural problems” (Lodi et al., 2022). Eight elementary schools feed into Magnolia, creating a student body diverse in race and ethnicity. While nearby housing is mostly middle-class, many of these families send their children to other public charters or private schools. Many of Magnolia's students are low-income Latinx, African American, and Asian students within the school boundaries. Unlike Pacific School, Magnolia is not known for academic achievement, with test scores below district and state averages. As required by the district school documents, Magnolia has a written plan on how to include parents in instruction and decision-making committees.

To examine how parents and school personnel conceptualize parental involvement at Magnolia Middle, this chapter first analyzes the institutional structures designed to support parent engagement. It begins with a review of how parental involvement is framed in key school documents. The chapter then examines parents' perspectives on these structures and how they describe their roles, both broadly and in relation to mathematics education. The final section

analyzes the school personnel’s perspectives on parental involvement, highlighting areas of alignment and tension between institutional expectations and lived practices.

4.1 Overview of Major Points in Magnolia Middle School Key Documents

In California, each Local Educational Agency (LEA), such as a public school district and a charter school, is required to submit a Local Control Accountability Plan (LCAP) to the County Office of Education (COE) or to the California Department of Education (CDE), respectively. The LCAP, submitted every three years, describes the programs and services the school offers and how it meets the local and state priorities, which include outlining its goals, actions, services, and expenditures regarding student academic achievement, school climate, and family engagement (CDE, 2025). For this study, the 2023-2024 District LCAP and the 2024-2025 District LCAP document summaries are key documents to understand the school’s overall structure to build and sustain parental involvement. Six other key documents were identified and analyzed: 2022-2023 and 2023-2024 Magnolia School Accountability Report Card (SARC); 2024 Magnolia Middle Dashboard Report; and 2024-2025 Magnolia School Plan for Student Achievement (SPSA). The 2022-2023 and 2023-2024 SARC Reports align with the LCAP goals and identify opportunities for parental involvement. The 2024 Magnolia Middle Dashboard Report, from the state, provides data on student outcomes and parent and family engagement. However, in the year of this study, the dashboard report did not include information regarding whether the school meets the family engagement standard. Lastly, the 2024-2025 Magnolia SPSA describes the plan of action to raise student academic performance and improve the school’s educational program. The SPSA, also aligned with the LCAP, includes the Title I Parent and Family Engagement Policy as well as the Title I Parent Involvement Policy, which describe

how the school plans to engage parents in decision-making and communication with teachers.

The SPSA also includes the Title I School-Parent Compact, which outlines the responsibilities of each stakeholder (administration, teachers, parents, students) regarding contributing to the well-being of the student.

Below, portions of the LCAP and the SPSA are analyzed in detail, as these pertain more to how Magnolia Middle outlines its parent involvement plans and structures for the 2024-2025 school year, specifically goals one and five of the LCAP, as well as the structure of the family engagement team outlined in SPSA.

4.1.1 Goal One of LCAP: Create an Inclusive Environment

The 2023-2024 San Miguel Unified School District (SMUSD) LCAP describes six major goals: 1) “Cultivating Inclusive, Anti-Racism, and Restorative Schools, Classrooms & District – with Equity at the Core and Support for the Whole Child;” 2) “Access to Broad and Challenging Curriculum;” 3) “Accelerating Learning with High Expectations for All;” 4) “Quality Leadership, Teaching and Learning;” 5) “Family and Community Engagement with Highly Regarded Neighborhood Schools that Serve Students, Families and Communities;” and 6) “Well-Orchestrated Districtwide Support Services and Communications” (LCAP, 2023-2024). This section focuses on Goal 1, creating an inclusive environment, which includes hosting workshops focused on strengthening relationships among the parents and educators.

According to the 2024-2025 Magnolia SPSA document, school personnel draw on four strategies to improve the systematic implementation of restorative practices and social-emotional development:

It is essential that students feel safe, welcomed, and connected to the school community and have a strong sense of belonging, along with the skills to joyfully thrive. It is important for staff and families to feel safe, welcome, and supported as well. This requires love as action and being restorative in how we treat one another... we systematically implemented restorative practices and social emotional development in students and adults with student, staff, and family voice and participation. (24-25 SPSA Magnolia Middle, p. 5)

These practices include family voice and participation: family development workshops, a principal's family advisory group, family academic nights, and home visits. The first strategy is to hold family development workshops, which are monthly informational and learning opportunities meetings for all Magnolia parents and caretakers. The workshops are conducted in a variety of languages, with interpreters, translation services, and childcare. According to the school district documents, a wide range of topics can be covered at these meetings: improving home-school communications, state testing, supporting multilingual learners, and providing training to parents on how to support and work with their children at home and school. Additionally, community organizations' workshops could also be scheduled at these monthly meetings. According to the 2024-2025 Magnolia SPSA, parents suggest the topic and the school site council approves it.

The second strategy is to form a principal's family advisory group, representative of all Magnolia families, to ensure that all voices are heard. This group is intended to meet monthly, alternating day and evening times, to discuss general school information and to advise the school site administrator on parent and family needs to support their students. The third and fourth strategies are the family academic nights and home visits. The family academic events are envisioned as opportunities for the various departments to build engagement with families in academic activities. In theory, this could also include events to build engagement with families in mathematics. Additionally, according to school documents, these academic nights could be

opportunities for families to engage as participants and/or facilitators. The home visits strategy involves weekly visits by school counselors and administrators to the homes of students who are chronically absent or who show patterns indicating that they may become chronically absent.

4.1.2 Goal Five of LCAP: Family and Community Engagement

Goal Five of the LCAP describes the family and community engagement with highly regarded neighborhood schools that serve students, families, and communities. Any school receiving Title I funding needs to jointly develop a parent-school compact with parents, outlining how the school and parents will share responsibilities to help the student meet state standards. In the year before this study, the parent-school compact was shared during the 2024-2025 back-to-school meeting. It outlined Magnolia's minimum responsibility to hold parent-teacher conferences, send grading reports home, have reasonable parent volunteer opportunities, and ensure regular parent-school personnel two-way communication in the families' preferred language. These responsibilities are described in more detail below.

According to the parent-school compact, Magnolia offers multiple avenues for parent-teacher engagement. Magnolia is responsible for holding parent-teacher meetings that are scheduled based on students' individual needs. These meetings are held via Zoom with interpretation or in person. Mandatory conferences, such as Individualized Educational Plan (IEP) and the 504 meetings, are held and reviewed on an ongoing basis. The parent-school compact also outlines how Magnolia Middle is responsible for sending report cards twice a year and progress reports four times a year. These are also available on the parents' online platform. In addition, parents can shadow their child in class. The 2024-2025 Title I School-Parent Compact also describes that parents should have reasonable access to personnel, opportunities to

volunteer, opportunities to participate in committees, and observe their children's classes. The school-parent compact also lists the different decision-making committees for which Magnolia Middle needs parent representation: School Governance Team (SGT), the School Site Council (SSC), the English Learner Advisory Council (ELAC), the District Advisory Committee (DAC), and the parent advisory group. It also states that these meetings will be hosted on Zoom, recorded, and sent to parents to encourage parent participation. Lastly, in addition to using Zoom, the School-Parent Compact states that the school will use different online platforms to share information and events with parents, in various languages.

Furthermore, the Title I Parent and Family Engagement Policy 2024-2025 outlines the purpose of the yearly back-to-school night: for parent-teacher meet and greet, and to share the description of the Title I program and requirements with all participating parents.

4.1.3 Family Engagement Team

The SPSA describes a district-level family engagement department that supports home-school collaborations for student success. Similarly, Magnolia Middle has a school-level family engagement team responsible for overseeing everything about parent and family engagement at the school and strengthening home-school collaboration on site. According to the SPSA document, this team is composed of teachers, staff, and the administrative assistant; in reality, the administrative assistant appears to be the point person for coordinating parent volunteer opportunities. This includes the monthly family workshops and academic nights, described in the first goal of the LCAP, the volunteer opportunities described in the fifth goal, as well as opportunities for parent involvement in science, math, and English, as outlined in the Title I

parent involvement policy. Additional responsibility, as outlined in the Title I parent involvement policy, includes conversational English classes and hosting a yearly college fair.

4.1.4 Summary of Key Documents Findings

An analysis of Magnolia Middle School’s key policy documents—including the district’s LCAP, the SPSA, the SARC, and Title I parent engagement policies—reveals that the school formally prioritizes family engagement through multiple structures and initiatives. In particular, LCAP goals one and five emphasize creating inclusive school environments and strengthening family–school partnerships through activities such as monthly family engagement workshops, a principal’s family advisory group, family academic nights, and weekly home visits. Additionally, the school-parent compact outlines requirements to maintain and nurture parent-school communication, such as parent-teacher conferences, multilingual online platforms, and volunteer opportunities in school events and in school governance committees. Lastly, Magnolia also outlines a school-level family engagement team responsible for overseeing and coordinating all parent engagement activities on campus. Overall, Magnolia School’s key documents outline multiple ways for parents to participate in school decision-making, communication, and academic support activities. Magnolia Middle’s parental involvement plan is summarized in Figure 4.1 below.

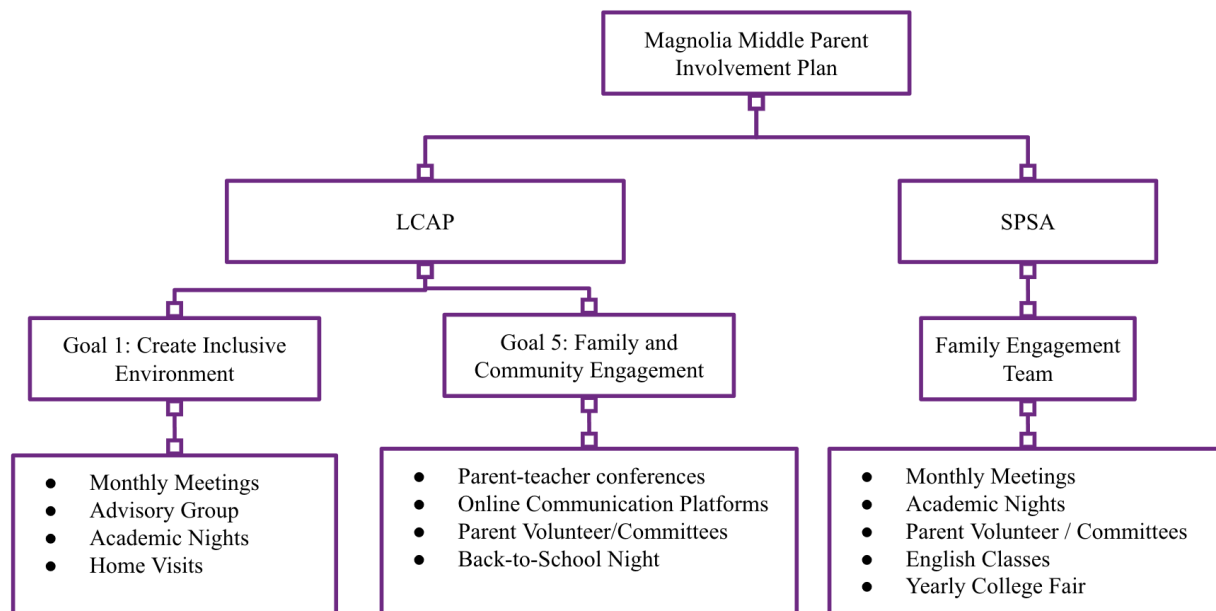


Figure 4.1: Magnolia Middle Parent Involvement Plan

4.2 Parents' Perspectives

This section describes how parents understand the parent engagement structure at Magnolia Middle, how much of the written structure existed, and what they describe as their hopes and aspirations when it comes to parent engagement at school (RQ2). Lastly, this section will describe how parents draw on their funds of knowledge for their children's academic support. Table 4.1 below offers pseudonyms for parent names and the grade level of their children.

Table 4.1: Parents Interviewed at Magnolia Middle

Parent name	Student's grade	Job information	Interviewed in:
Alfredo	7th grade	Restaurant (Cook)	Spanish
Kyle	7th grade	Stay-at-home parent	English
Johana	7th grade	Caregiver	English
Paola	6th grade	Scientist	English
Maria	8th grade	In Home Social Services (IHSS)	English
Elora	7th grade	Cashier	Spanish

4.2.1 Parents' Participation in the School's Parent Engagement Structures

From their perspective, Latinx and other minoritized parents responded to Magnolia Middle's parental involvement plans with selective participation shaped by work schedules, family responsibilities, and perceived relevance. Parents expressed appreciation for opportunities that fostered relational connection, cultural affirmation, and practical support, while also noting structural barriers that limited their participation—particularly in academically focused and school-initiated activities. This section of the chapter describes how parents participated in the parent engagement structure outlined by LCAP Goals One and Five.

LCAP Goal One: Schoolwide Parent Engagement Activities. This section describes how parents participated in the monthly parent events, the academic nights, and home visits. My field visit observations and the parent interviews revealed that these monthly meetings were structured and looked different from what was described in the school key documents. Parents described attending several school-organized family engagement events scheduled throughout the school year, though participation varied across activities and over time.

The monthly parent events—such as workshops, fitness activities, potlucks, and communication-focused sessions—were generally viewed as welcoming and meaningful when they aligned with parents’ interests and availability. Parents highlighted the cultural potluck as especially successful, noting that it allowed families to contribute their cultural knowledge and engage informally with students and school personnel. Maria, Elora, and the administrative assistant contacted parents to help cater this event. A total of 19 parents participated in the event, including parents who brought food. As Maria explained, the event created space for families to share “a little taste of food... from their cultural background.”

Some of these monthly parent meetings were scheduled during school hours, while others took place after school. For example, in one month, a parent meeting on supporting students was held after school, while in another month, a fitness activity was organized in the morning during the first class period. As the fitness activity ended, a white-presenting parent made small talk and mentioned that parents usually do not attend school events because they are not interested. When she learned that 15 parents had participated in the activity that day, she remarked that, out of 800 students, 15 parents were “nothing.” She also added that she had not originally planned to attend the event but was able to join because a work meeting had been canceled.

Parents also valued workshops that provided practical strategies for supporting their children, particularly when materials were available in oral or written form and in their home language. The first monthly parent workshop was about parents as learning partners, supporters, monitors, and advocates, which draws on the partners in education framework (Mapp & Kuttner, 2013). 13 parents, some with small children, joined, who spoke different languages: Vietnamese, Haitian Creole, Spanish, and Nepali. Although the school did not provide childcare, it did provide various interpreters, except for Nepali. The Nepali-speaking parent was told to let the

school know so that translation would be available next time. Johana and Elora described a January parent–teen communication workshop as helpful; Elora emphasized the importance of having take-home materials from the workshop to fully process the content: “I like that I can read the information later... because I might not grasp everything at the time.” This suggests that some parents responded positively to academic and social-emotional support when it was accessible and flexible.

At the same time, parents identified gaps between the school’s formal engagement plans and their lived experiences. Parent advisory groups, academic nights, and home visits described in school documents were not mentioned by most parents, suggesting—at least among those interviewed—limited awareness of or exposure to these initiatives. While Kyle was the only parent who reported attending a science fair the year before this study, none of the interviewed parents indicated that they were aware of the weekly home visits. This finding may also reflect selection bias, as it is possible that the administration and counseling team had not conducted home visits with any of the parents who participated in the interviews.

LCAP Goal Five: Parent–School Compact and Academic Engagement. LCAP Goal Five describes how parents participated in the structures outlined in the parent-school compact, particularly the parent-teacher conferences, access to student data, volunteer opportunities, and parent-teacher communication channels. Parents’ engagement with academically oriented structures—such as parent-teacher conferences and access to student information—was similarly shaped by time, work demands, and family priorities.

Parent-Teacher Conferences and Back-to-School Night. Parents who attended conferences described them as important opportunities to learn about their children’s academic

progress. Alfredo emphasized the value of these meetings, stating that it was important to talk to the teachers to understand how his children were doing academically. However, several parents mentioned being unable to attend conferences due to late notification or work conflicts. Elora mentioned that she was informed late and could not ask for the time off: “*Me enteré, pero no tuve tiempo por mi trabajo. No pude pedir la tarde para poder ir a hablar con los maestros este año*” (I found out about it, but I didn't have time because of my job. I couldn't ask for the afternoon off to go and talk to the teachers this year). Others described prioritizing conferences for younger children when schedules overlapped, reflecting strategic decision-making rather than a lack of interest. Kyle, a parent who has a 7th grader and five other children in the district, explained that he often chose to attend elementary school events first, given his children's needs and limited availability: “Priority from the youngest to the oldest. So I don't know if it's the right choice, but that's what I've been doing.”

Back-to-school night emerged as the most consistently attended academic event and, for some parents, the only time they interacted directly with teachers. During a field visit, I observed that more than half of the school auditorium was filled. Nearly all six parents interviewed reported attending the event, and, for some, it was their only opportunity to meet their child's teachers. Elora explained that this was the only time “*que yo habré hablado con los maestros de mi niño*” (that I have spoken with my child's teachers). Other parents described these brief encounters as sufficient for initial communication but limited in depth. Paola, for example, noted that although she had teachers' contact information, she did not need to reach out because she had not encountered any academic concerns. These accounts suggest that while back-to-school night facilitates initial communication, it may not lead to sustained or deeper parent-teacher engagement, an issue examined further in Chapter 7.

Access to School Personnel, Volunteer Opportunities, and Participation in Committees.

Parents described varying levels of access to school personnel and volunteering. Some of the parents interviewed expressed difficulty accessing school personnel. Elora, for example, mentioned that she had difficulty connecting with the school or the teachers: “*No sé directamente con quién tengo que ir a hablar*” (I don’t know directly who I need to go and talk to). Kyle expressed difficulty keeping up with the teachers of all his children: “I have eight kids in the district, so there are way too many people for me to remember.” The rest of the parents shared that they had direct communication with teachers and interactions with the front office; three of them mentioned direct communication with the administrative assistant, who coordinates parent engagement efforts.

Parents also expressed varying levels of participation as volunteers. Three parents mentioned volunteering regularly, especially during lunch-based activities such as reading and garden clubs, and in organizing school events. On the other hand, Alfredo mentioned being able to bring *pozole* (Mexican traditional stew) to a recent monthly event since he did not work that day, and Kyle mentioned attending a science fair, the only event he was able to attend. These various forms of involvement allowed parents to contribute their time, organizational skills, and cultural knowledge in ways that felt meaningful and manageable to their reality.

In contrast, participation in formal school committees was minimal. Parents cited work schedules and meeting times during the school day as primary barriers. Only Maria shared prior experience on committees, describing Zoom meetings as more accessible than current in-person formats: “We did a lot of Zoom meetings ... It was new to me as well, so I was trying to be a little bit more involved.” Observations of an ELAC meeting further highlighted these barriers, as the administrator acknowledged that the four parents involved in the committee were unable to

attend due to work, yet proceeded to hold the meeting, without Zoom, during the school day and at a different location than usual. The absence of parent attendees at this meeting highlights that the meeting was held to meet bureaucratic requirements but underscores how limited scheduling flexibility and inconsistent logistics limit parents' participation in formal school decision-making structures.

Real-Time Student Data and Two-Way Meaningful Communication. From parents' perspectives, participation in the school's parental involvement plans was shaped primarily through communication practices rather than through formal academic monitoring systems. None of the parents interviewed referenced report cards, progress reports, or access to real-time student data. Because the interview protocol did not explicitly ask about these tools, and no observations were captured about this, the data does not capture how parents engage with formal academic reporting, including mathematics-specific performance information.

Instead, parents emphasized their engagement through school communication channels. Although the 2024–2025 Title I School–Parent Compact outlines multiple platforms for two-way communication (e.g., e-mail, multiple online parent platforms, school newsletters, and social media), parents most identified email and general online communication on one of the parent online platforms as primary sources of information. Four parents noted regularly receiving notifications about school events. Maria, for example, noted that the school “sends emails... with a lot of flyers” about academic and extracurricular opportunities and described the school as “very good about sending notifications,” while also emphasizing that parents often need to actively seek information or ask the front office for support.

Language accessibility emerged as a key factor shaping parents' responsiveness to school-based involvement efforts. Parents highlighted and appreciated the availability of translated materials and interpretation services as facilitating their participation. During my field observations and interviews, these mechanisms were being constantly used. Kyle observed that school communications clearly indicate the languages in which the workshops could be translated, while Maria described how administrators survey families in advance to identify translation needs and provide interpreters and headsets at events "so that [Magnolia] can get them ahead of time." Overall, parents' responsiveness suggests that while they may not engage extensively with formal academic data systems, they are responsive to the school's involvement plans when communication is timely, accessible, and linguistically inclusive. They also viewed the school's attempt to provide communication in multiple languages as a sign of inclusivity and an effort to reach diverse families.

English Classes. English classes were mentioned by five parents, but attendance was constrained by scheduling, as classes were held during the workday. Alfredo expressed interest in the English class but explained that work obligations prevented participation. The parent English class was held on Wednesdays, 10 am -12 pm, meaning that it was only accessible to parents who were not working or whose day off happened to be Wednesdays. Through my field visits, I learned that despite the administrative assistant sharing the parents' contact information with the non-profit organization organizing the parent English class, a maximum of four parents came to the English class on a good week. This illustrates how structural constraints shape parent engagement decisions.

Summary. Overall, from parents' perspectives, Latinx and other minoritized families participated in Magnolia Middle School's parental involvement plans with interest, commitment,

and initiative, while navigating significant structural constraints. Parents were most engaged in activities that were culturally responsive, relational, and flexible, and less able to participate in academically oriented or decision-making structures that conflicted with work schedules or were poorly communicated. Their participation reflects not disengagement, but rather strategic participation shaped by time, access, and perceived relevance—particularly in supporting their children’s academic and social development.

4.2.2 Parents’ Hopes and Aspirations

The second sub-research question explores parents’ hopes and aspirations: what are their hopes for their involvement in education, both generally and, more specifically, in mathematics education? To answer this question, it might be helpful to first understand what parents say are the reasons and challenges for meaningful parent engagement.

Reasons for Parent Engagement. From the Magnolia parents’ perspectives, hopes for involvement in education—both broadly and in mathematics—are grounded in concerns for their children’s well-being, development, and long-term success. Parents described participation in school activities as a way to signal care, stay informed about their children’s academic and social well-being, actively support their learning, and to contribute to a cultural shift in parent engagement. Alfredo, a parent interviewed, emphasized the importance of visibility, noting that parental participation helps children recognize that education matters and motivates them to persist in school: *“Es muy importante que vaya uno a participar para que los niños también vean que uno está interesado... para que sigan estudiando y tengan un buen trabajo”* (It’s very important to participate so that children see that you are interested... so they can keep studying and have a good job).

Several parents highlighted involvement as a means of understanding their children's academic experiences and social development during adolescence. Johana explained that being involved allows her to know "what she's learning and how she socializes with her peers," while Maria noted that children often behave differently at home and at school, making parental presence essential for gaining a fuller understanding of their experiences. Parents also viewed engagement as particularly important during middle school, a period marked by rapid social, emotional, and biological changes. Kyle described this stage as one in which both children and parents must adapt quickly, underscoring the need for parents to remain informed and attentive: "Not only are the kids changing, but also the parents have to know that the kids are changing... Some parents don't know that's what's happening. Or that change is happening at a very fast pace." Parents further expressed aspirations to get involved to counter broader social influences and to foster a culture of involvement that they themselves may not have experienced. Johana pointed to social media and other external pressures as reasons to remain closely engaged: "For us to get involved as much as we can with the kids, especially because now it's social media. The world is exposing them to a lot of things that they shouldn't." This acknowledgement of rapid change in middle school and combating negative social forces is further explored in Chapter 6.

Lastly, other parents mentioned that parent involvement is really important and that a cultural shift around parent engagement needs to happen. Maria reflected on her own schooling, explaining that her own mother's limited involvement—due to language barriers—motivated her to be more present in her child's education: "I wish she would've been more involved ... It would've motivated me to do better, to know that I'm able to do more things, but she wasn't involved ... that's why I want to be involved." For these parents, involvement represents an

intentional effort to shift norms around parental engagement and to remain active partners in their children's schooling, regardless of whether academic concerns are immediately apparent.

Parents also articulated hopes for involvement that extend beyond attendance at required events. Maria emphasized the importance of proactive engagement, encouraging parents to routinely be present at school and to communicate with teachers outside of formal meetings:

Parents should be more proactive ... Not just wait for those parent-teacher meetings [and say] "How can I help my student learn this?" ... Parents need to set aside time and say, "I'm going to spend it at school, see what I can help them with."

Maria shared that she works in In-Home Supportive Services (IHSS) while caring for her son, who has moderate to severe needs and requires specialized instruction and a high level of support at home due to a significant cognitive, developmental, or physical disability. As a result, she explained that her schedule is relatively flexible. She also mentioned encouraging other parents in similar flexible situations to incorporate time at the school into their routines. On the other hand, working mom Elora described parent involvement as a way of building relationships with teachers and school personnel so that parents know where to turn when their children need support. She emphasized that without these relationships, families are less able to advocate effectively for their children: "*No tenemos esa cultura de ser un apoyo para nuestros hijos ... Si no conocemos quiénes son los maestros de nuestros hijos, no podemos buscar ayuda cuando ellos la necesitan*" (We don't have that culture of being supportive of our children. If we don't know who our children's teachers are, we can't seek help when they need it).

Overcoming Challenges for Meaningful Parent Engagement. Despite these aspirations, parents identified several challenges that constrain their involvement. Scheduling conflicts—particularly work obligations and competing responsibilities across multiple

schools—were the most frequently cited barriers. Kyle explained that when events overlap for his eight children, he prioritizes his younger children’s schools; he added that he “hopes that all the schools communicated” to coordinate their school events and accommodate parents in similar situations. Other parents, like Alfredo and Elora, noted that work schedules limit their ability to attend meetings or workshops. Alfredo mentioned that he is rarely able to attend due to his work. But when he can, he goes, “*Casi no voy, por eso del trabajo y ahí veces que no lo permite (el trabajo) en la tarde. Esta vez tuve la oportunidad de participar y participé*” (I hardly ever go, because of work, and sometimes my job doesn't allow me to go in the afternoon. This time I had the opportunity to participate, and I did). Similarly, Elora also participates as much as her work schedule allows: “*Cuando tengo tiempo, sí me gusta aunque sea en lo que le pueda ayudar ahí [en la escuela]*” (When I have time, I do like to help at school in whatever way I can). She also noted that, because of her rotating work schedule, she was only able to attend one of the four parent workshops on parent–school collaboration. Taken together, these comments suggest that increasing parent participation in school events and workshops may require greater attention to the work schedules of many families at Magnolia Middle, including limiting events scheduled during typical work hours.

Health concerns, both for parents and children, also restricted participation. Johana, for example, mentioned that health issues prevented her from becoming as involved as the year before this study. Similarly, Maria, who has a moderate-severe student, described withdrawing from committees and volunteer roles due to intense health-related demands, despite strong intentions to remain involved. In the year before this study, for example, she was part of a committee, but had to withdraw due to health concerns: “I joined a committee ... but because of my health and my kids' health, I had to withdraw.”

Parents additionally identified childcare and educational background as barriers to engagement. Maria recounted missing a district-level parent involvement event, as a representative of parents at Magnolia, when childcare arrangements fell through, highlighting the fragility of participation when supports are unavailable: “I ended up not showing up, but I intended to be there. I had a whole speech, and I was kind of ready for the questions.” Maria also reflected on feeling less confident in committee spaces alongside parents with more formal education: “There was a mom in there who kind of knows a lot more. She's more educated, has more of an education background, so she kind of knew what she was doing.” Maria’s reflections underscore how differences in educational and linguistic backgrounds can shape parents’ comfort and sense of belonging.

Together, these findings suggest that while Latinx and other minoritized parents have strong hopes for meaningful involvement—motivated by care, advocacy, and cultural change—their ability to enact these aspirations depends heavily on flexible, inclusive structures that acknowledge the realities of parents’ lives and experiences. Work schedules, responsibilities across multiple schools, health concerns, childcare needs, and differences in educational background influence when and how parents can participate. Aspects of the parents’ realities, such as scheduling and childcare, are only partially acknowledged in school plans. For example, school documents state that childcare is provided during school events; however, none of the events or workshops I attended offered childcare. This observation suggests a disconnect between the school’s documented plans and the realities experienced by parents. It highlights the need for further analysis of less visible barriers, such as family health issues or social dynamics due to various degrees of education across the parent population, that may affect their participation. This finding requires more elaboration, explored in Chapter 6, as it speaks to the

variation of parent participation at school and its implications for broadening opportunities for parental involvement that are flexible, accessible, and attentive to the diverse circumstances of families. These findings also point to the need for schools to intentionally address power dynamics and create engagement spaces where parents with diverse experiences, languages, and educational histories feel welcomed, valued, and empowered to contribute meaningfully. Figure 4.2 below summarizes the main reasons and challenges for parental involvement at Magnolia Middle.

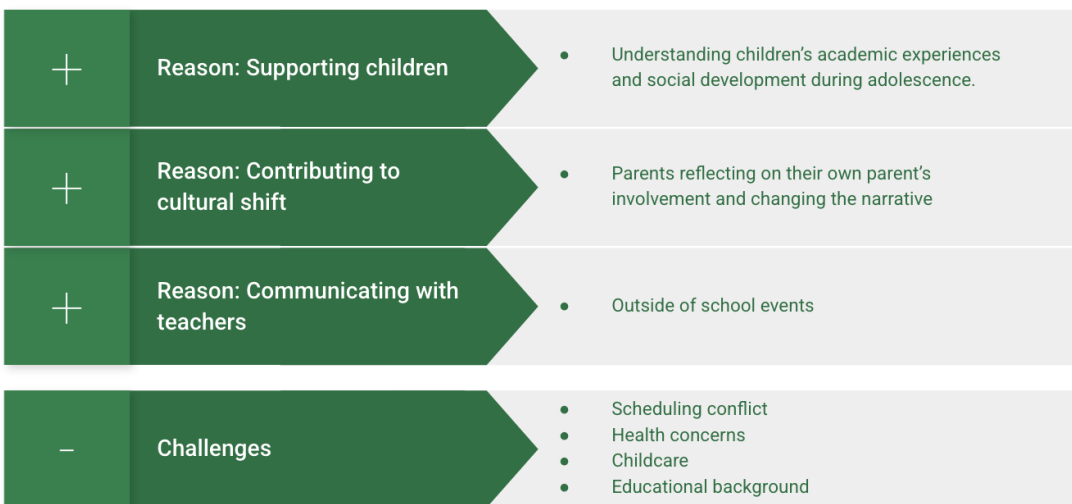


Figure 4.2: Main Reasons and Challenges for Parental Involvement at Magnolia Middle

4.2.3 Parents' Hopes and Aspirations in Mathematics Education

The second sub-research question explores parents' hopes and aspirations: what are the parents' hopes for their involvement in education, both generally and, more specifically, in mathematics education? This section shares findings on what parents said were the reasons and challenges for meaningful parent engagement in mathematics education.

Reasons for Parent Engagement in Math. Parents' hopes for involvement in mathematics education were shaped by their own familiarity with mathematics, their desire to support their children's learning, and their recognition of mathematics as a critical life skill. Parents described varying levels of confidence and comfort with the mathematics their children were learning at Magnolia Middle, which in turn shaped how they envisioned their role in supporting mathematics learning at home.

Some parents viewed themselves as capable resources for their children's mathematics learning and, therefore, did not seek additional support from the school. Paola, for example, drew on her prior experience as a mathematics tutor: "I am very familiar with math... If she needs help, she usually asks me for it." Similarly, Kyle reported that mathematics had not posed challenges for his family, while Maria noted that mathematics support was not applicable within her child's moderate-severe classroom context. For these parents, involvement in mathematics meant direct assistance at home rather than participation in school-based support.

In contrast, other parents expressed difficulty engaging with new approaches to mathematics instruction. Johana described struggling with the "new way" her daughter is taught, explaining that she relies on the methods she learned herself, even when they differ from the curriculum: "Well, I can't learn the new way... So I stick to my old way of mathematics that I know how, and I still come to teach her how to do the answer." Elora echoed this concern, noting that current expectations for students to explain their mathematical thinking make it harder for her to support her son: "*La pregunto, yo lo veo sencilla, pero ellos tienen que explicar más ... Para mí es más difícil*" (The question, I see it as simple, but they have to explain more... For me, that is more difficult). Despite these challenges, these parents expressed a strong desire to help their children succeed and to better understand the instructional approaches used in school.

Regardless of their comfort level, parents consistently emphasized the importance of mathematics. Alfredo described mathematics as foundational across subjects, while Paola highlighted its role in developing problem-solving and critical thinking skills, noting that mathematics is “not about algebra in everyday life” but about learning how to approach problems systematically: “It’s about the problem-solving that math gives you. There are different ways to think about it, how to approach issues, and the step-by-step part of it.” Parents’ hopes for involvement in mathematics education extend beyond homework completion to supporting broader problem-solving and life skills.

Overcoming Challenges for Meaningful Parent Engagement in Math. Several parents also expressed a desire for schools to better support parents’ involvement in mathematics. All parents noted the absence of math-focused workshops or events at Magnolia Middle. While Paola recalled attending a district-wide Zoom mathematics session in elementary school, she found it unhelpful and inefficient: “They spent at least 30 minutes introducing themselves...I’m taking a break [at work], and you’re making this last [longer] when it shouldn’t be.” Parents suggested school-based mathematics workshops designed to help families support learning at home. Kyle, for example, advocated for parent workshops that reduce intimidation and leverage peer learning, noting that basic mathematics can be accessible to all parents regardless of language: “There cannot be a language barrier for one plus one ... but yeah, try parents involved in teaching other parents in math, so they’re able to help (their children).”

In addition to school-based mathematics workshops, parents also shared concrete recommendations to improve engagement, such as providing written materials to accompany presentations. Elora emphasized that including handouts could allow parents to review information at their own pace and deepen their understanding: “*Puedo revisar lo que nos dieron,*

o yo puedo hacer mis notas y aprender un poco más de esa manera (I can review what they gave us, or I can take my own notes and learn a little more that way). Additionally, parents raised affective and cultural considerations that shape mathematics involvement. Kyle observed that some parents—particularly immigrant parents—may hesitate to engage in mathematics support out of fear of appearing unknowledgeable in front of their children: “And some parents...try not to look stupid or dumb in front of their kids...They're embarrassed to say they don't know...It's different as an immigrant telling your kid, ‘I don't know.’” This concern, further elaborated in Chapter 6, points to parents’ hopes for learning environments that are affirming and empowering, where parents can engage in mathematics without stigma. Many of the parents at Magnolia Middle are immigrant parents or first-generation families. More research is needed to understand the sentiment of immigrant parents in relation to involvement in mathematics.

Overall, Latinx and other minoritized parents expressed aspirations to be active partners in their children’s mathematics education, whether through direct support at home or through school-facilitated learning opportunities. Their hopes center on gaining accessible tools, culturally responsive supports, and confidence-building opportunities that enable them to engage meaningfully in mathematics, even when their own educational experiences differ from current instructional practices.

4.2.4 Parents’ Funds of Knowledge

Drawing on Moll et al. 's (1992) framework, this section examines how Latinx parents describe using their funds of knowledge—historically accumulated, culturally developed skills and knowledge—to support their children’s academic learning. I examined parents’ usage of funds of knowledge both in generalized education and in mathematics. Analysis of six parent

interviews and ethnographic observations revealed multiple ways that parents draw on community, cultural, linguistic, and experiential resources to support their children's schooling.

Drawing on Funds of Knowledge for Education. Parents described drawing on community-based networks and resources to support their children's intellectual and socioemotional development. At least two parents mentioned using local libraries as key academic resources. Johana described taking her daughter to tutoring programs at the library, while Elora emphasized participating in science-based library activities, such as weekly science lessons and hands-on learning opportunities: "*Antes los llevaba a la biblioteca, a los viernes de ciencia ... Participando en actividades diferentes de ciencias*" (I used to take them to the library, to science Fridays... participating in different science activities). These examples illustrate how families leverage public institutions to supplement school-based learning.

Parents also described drawing on faith-based and community organizations to support their children's educational and developmental needs. Maria, the parent of a student with an IEP, described relying on her church and a community center that provides access to therapy and disability-related services. She noted that these spaces connect families to resources essential for their children's well-being. Her selective use of community resources reflects strategic knowledge of which supports best meet her family's needs.

Beyond accessing external resources, some parents drew on organizational and leadership skills to support the school community. Maria, in particular, demonstrated extensive engagement by volunteering at Magnolia Middle for three years, organizing events, accompanying students on field trips, and coordinating family activities. Drawing on her experiential knowledge as a parent of a student in a moderate-severe classroom, she identified gaps in family engagement

opportunities for students with disabilities and their families. She explained that many parents of students with IEPs feel excluded from school events and, therefore, disengage. In response, she initiated and organized inclusive activities that centered on the needs of these students: “Family engagement is for everybody, [but] parents with kids that have an IEP don't usually attend because we feel out of place... so I said, why can't we do something that our kids can do? What can I offer?” Her actions exemplify how parents' lived experiences inform advocacy and inclusive practices within the school.

Maria also described being invited to represent Magnolia Middle parents at a district-level engagement event, preparing a speech for the board of education. Although health and childcare challenges prevented her attendance, her preparation reflects how parents draw on communicative and advocacy skills to engage beyond the school site.

Drawing on Funds of Knowledge for Mathematics Education. Parents similarly drew on diverse funds of knowledge to support their children's mathematics learning. Several parents mentioned using community-based academic supports — such as libraries, after-school programs, and nonprofit organizations — to access mathematics tutoring. Alfredo, for example, described familiarity with multiple tutoring programs and regularly enrolled his daughters when additional support was needed, demonstrating knowledge of local educational resources.

Parents also drew on linguistic and social networks to navigate school systems related to mathematics. During back-to-school night, for example, one parent relied on me—a bilingual community member—to help communicate with the mathematics teacher and set up the online parent portal. This interaction illustrates how families leverage community linguistic capital to navigate institutional and technological barriers that may otherwise limit communication with

schools. In this instance, my own social and linguistic resources functioned as a bridge between the parents' desire to engage with the teacher and the institutional structures that made such engagement difficult.

This experience also highlights a broader opportunity for schools to intentionally draw on the funds of knowledge present within parent communities (Moll et al., 1992). Many parents who attend school events possess linguistic and cultural resources that could support other families' participation. For example, schools might invite bilingual parents to volunteer as translators during back-to-school night. Because this event already attracts many families, it provides a natural setting for facilitating communication without requiring additional time commitments from parents who may face demanding work schedules or other family responsibilities. Structuring opportunities for parents to contribute their linguistic expertise in this way could strengthen family–school communication while recognizing parents as valuable intellectual and cultural resources within the school community.

In addition to these forms of support, parents also drew on experiential and advocacy-oriented knowledge to address mathematics instruction at the school level. Paola described learning during back-to-school night that overcrowded mathematics classes limited students' instructional time: "A math teacher let us know that if they were to complain or bring that up, the excess students get sent to the library, and they're not instructed on anything." Drawing on her understanding of institutional systems and her commitment to mathematics as a critical subject, Paola advocated for additional mathematics teachers by contacting the district office:

I know it must be very frustrating for the teacher; it's very frustrating for my daughter too, because she's not able to learn. I have no idea who to talk to to try to get another teacher there. That's beyond my power ... So I did try searching the district website ... I sent a general email.

Although her attempt was unsuccessful—she reported not receiving a response from district personnel—Paola’s actions illustrate how parents mobilize problem-solving skills, institutional navigation, and advocacy to support not only their own children but broader instructional conditions within the mathematics department, a point further explored in Chapter 6.

Across interviews, parents demonstrated that their funds of knowledge extend beyond direct homework assistance. These resources include: strategic use of community educational supports, linguistic and cultural mediation, organizational knowledge, and advocacy efforts. From parents’ perspectives, such practices represent meaningful forms of academic involvement that support their children’s learning, even when formal school structures do not fully recognize or accommodate them. Viewed through a funds of knowledge framework (Moll et al., 1992), these examples illustrate how families actively mobilize community-based knowledge, social networks, and lived experiences to support mathematics learning and navigate educational systems. Recognizing these parents' funds of knowledge can expand traditional forms of parental involvement in mathematics education and help restructure parent-school relationships.

4.2.5 Summary - Magnolia Parents’ Perspective

Interviews with six Magnolia Middle School parents revealed that Latinx and other minoritized families describe their participation in the school’s parent involvement plan based on their work schedules, family responsibilities, and on their perceived usefulness of each school activity. Many of the parents attended back-to-school night and community-focused activities, but participation in formal decision-making committees was limited due to work schedules, childcare, health concerns, and communication gaps. Regardless, the parents interviewed expressed a strong will and desire to remain involved in their children’s education. In

mathematics education, parents described various levels of confidence in supporting their children due to differences in educational experiences and in current instructional approaches. Many parents expressed interest in school-based mathematics workshops or take-home resources to support learning at home. Across interviews, parents demonstrated that they draw on diverse funds of knowledge—including community resources, linguistic networks, and advocacy efforts—to support their children’s education, suggesting that meaningful parental involvement requires recognizing how to build upon parents' existing resources.

4.3 School Personnel’s Perspectives

This section describes how school personnel at Magnolia describe their view of parental involvement, both in general education and in mathematics education (RQ1). First, the section describes how personnel perceive parents respond to the current structures to build and sustain parental involvement. Second, the section describes how personnel perceive that parents’ draw on their funds of knowledge for academic support. For this study, six individuals from Magnolia were interviewed: two front desk staff members, two mathematics teachers (out of four), an assistant principal, and the principal. Table 4.2 offers a summary of information about the school personnel, teachers, and administrators who participated in the interviews. As a group, these participants are referenced as school personnel.

Table 4.2: School Personnel Interviewed at Magnolia Middle

Name	Role	Years in role	Years of experience
Ms. Gallegos	Attendance Clerk	2 years	30 years
Ms. Damara	Enrollment Clerk	1 year	2 years
Mr. Marshall	Mathematics Teacher	17 years	17 years
Mr. Lane	Mathematics Teacher	17 years	17 years
Dr. Hall	School Principal	3 years	5 years
Mr. Damian	Part-Time Assistant Principal	0.5 years	Unclear

4.3.1 School Personnel's Perspective: Reasons for & Challenges of Parent Involvement

During the interviews, the school personnel at Magnolia Middle School shared their perspectives on parents' motivations underlying parental involvement. For example, the two front desk personnel articulated that parents often engage with the school for logistical purposes, such as student enrollment, and to gain a deeper understanding of the school environment and daily routines. Similarly, the two mathematics teachers shared that parents typically get involved to monitor academic progress, seek updates from teachers, or address academic concerns. Mr. Marshall noted that, based on his experience, parents often reach out after recognizing that their children are struggling academically. Mr. Lane, a mathematics teacher, likewise shared that parents frequently contact him to follow up on student absences, request updates on academic performance, or inquire about grades:

Most contacts this year have involved parents asking how their students are doing academically and behaviorally. In one or two cases, parents noticed missing assignments and wanted to follow up. Overall, these interactions tend to be routine check-ins to ensure their children are doing well in class.

Finally, both the assistant principal and the principal shared that parents frequently engage with the school to address concerns related to student behavior or mental health, and to better support their children's overall well-being and success. Across the interviews, the school

personnel perceived themselves as being motivated by logistical considerations, academic monitoring, and concerns related to students' overall well-being.

Damira, the enrollment clerk, emphasized that students are positively influenced when they are aware of their parents' active participation and understanding of their school experiences:

When a parent is involved, and the student is aware that the parent is involved, and the parent understands their student's day-to-day life while at school, that, in my opinion, contributes to developing a strong student and encourages greater student engagement in learning.

The interviewees also discussed factors that limit parents' ability to participate in or attend school-based events. Ms. Damara also expressed empathy for parents who are unable to attend, acknowledging that competing responsibilities often make participation difficult. Both mathematics teachers identified multiple additional barriers to parental participation in campus events, including holding multiple jobs, caring for other children, and managing additional family or extracurricular commitments. Given this reality, Mr. Lane noted that approximately one-sixth of their students' parents attended back-to-school night (25 of 150 parents). While Mr. Marshall characterized low attendance as discouraging, Mr. Lane offered a more nuanced interpretation, emphasizing that limited physical presence at school events does not necessarily reflect a lack of parental care or investment:

Families are busy. Families have a lot going on... There are all kinds of reasons why maybe they can't come back to school today... I didn't make it to all of my kids' back-to-school nights this year, and I certainly care about my kids and want them to do well in school. Just didn't happen.

Drawing on his own experiences as a parent, Mr. Lane empathetically highlighted that families' competing obligations can prevent attendance at school events despite a strong interest

in their children's academic success. He also expressed appreciation for alternative forms of engagement, such as parents' responsiveness to electronic communication. These findings suggest that challenges with parental attendance at school-based events are largely shaped by structural and logistical barriers rather than a lack of parental interest or commitment. Additionally, these findings underscore the importance of recognizing alternative forms of engagement, such as responsiveness to electronic communication.

4.3.2 School Personnel's Perspective: Parents' Participation in School's Parent Involvement Structures

From the Magnolia school personnel's perspective, Latinx and other minoritized parents' participation in school's parental involvement efforts were understood as generally positive. However, personnel notes that these efforts were shaped by varying levels of access, communication, and school personnel familiarity with the involvement plan. Administrators articulated a clear vision for parental engagement and interpreted parents' participation as aligned with the school's community-centered approach, whereas teachers and front office staff demonstrated limited familiarity with formal involvement structures and described parental engagement primarily through day-to-day interactions.

Both administrators demonstrated in-depth knowledge of Magnolia's parental involvement framework. The assistant principal explained that parent involvement goals are embedded in the SPSA and are grounded in a community-building approach that prioritizes trust and comfort before academic engagement. He emphasized that this approach reflects the school's student demographics, noting that many families are immigrants or refugees who are new to the country. Accordingly, he mentioned that Magnolia implements a whole-child,

restorative-practices model that centers socioemotional development as a foundation for family engagement.

Similarly, Dr. Hall, the school principal, described parent and family engagement as integrated into district-mandated structures, including the home–school compact and LCAP goals. Rather than treating parental involvement as a set of isolated events, she emphasized that Magnolia intentionally embeds engagement goals across broader school priorities, such as academic achievement and the creation of a safe and inclusive school climate. Dr. Hall also mentioned that she views a distinction between parental “involvement” and “engagement,” noting that the school aims to move beyond parent on-campus attendance toward more meaningful participation: “It’s more about just having them show up... It’s having them engaged where they’re taking part in doing something.” This distinction points to the principal viewing involvement as a precursor to engagement.

To support this vision, the principal described the role of the family engagement team, which coordinates events and serves as a central structure for parent-focused initiatives. She emphasized that parental engagement is an ongoing, evolving process, shaped by parent feedback and school capacity. Magnolia uses parent surveys to solicit input on families’ needs and preferences about “ways that we can get them engaged ... to make them a part of the process.” For example, the school’s ongoing efforts to engage parents led to the formation of a family engagement team in the 2023-2024 school year. Further, because of feedback, Dr. Hall also mentioned that she replaced “coffee with the principal” with the monthly family events. From the administrators’ perspective, these efforts reflect parents’ willingness to engage when opportunities are responsive to their circumstances.

In contrast, the two mathematics teachers noted limited familiarity with the school’s formal parental involvement plan. Although both were aware of the SPSA as a required document, neither could describe its specific parent engagement components. Instead, they discussed parental involvement in terms of communication practices and school-based support. Mr. Lane highlighted the role of office staff and the attendance team in maintaining contact with families, particularly when attendance concerns arise and “help figure out why that is, and if there's a way we can help.” He also referenced professional development focused on family engagement, sharing a recent training emphasizing family engagement as “a two-way street” but that schools have the responsibility for “opening those lines of communication and setting up the systems where that can happen.”

The two front desk personnel—who interact most frequently with families—were similarly unfamiliar with school parental involvement documents. Damara, the enrollment clerk, noted that at the beginning of the school year, roughly 30 parents inquired about volunteer opportunities and requested the necessary paperwork; however, she indicated that she lacked information about how parents could meaningfully participate beyond completing forms. This suggests a disconnect between parents’ expressed interest in involvement and school personnel’s capacity to guide them within existing structures. It also suggests an opportunity to reassess how school personnel can help parents access available resources and learning opportunities.

Half of the school personnel interviewed referenced Magnolia’s parent center, though descriptions of its function varied. A mathematics teacher, Mr. Marshall, described the center as a resource center staffed by teachers, while the other mathematics teacher and the principal characterized it primarily as a physical space for meetings and classes, such as English classes for parents. Similarly, while the front desk personnel were aware of initiatives such as home

visits conducted by the counseling team and monthly family events, they described these efforts in generalized terms and were not directly involved in them. Nevertheless, school personnel perceived parent participation in activities such as English classes and monthly events as evidence that families were responding to the school's outreach efforts, even when participation represented only a small proportion of the parent population—often less than 5%.

Home Visits and Family Engagement Team. From the school personnel's perspective, Latinx and minority parents were perceived as responsive to targeted family engagement initiatives. Among the six interviewees, only the two mathematics teachers were unaware of the counseling team's weekly home visits; however, neither had participated in nor been invited to these visits. Approximately half of the interviewees referenced the parent English classes offered on campus, noting that parents had actively requested these opportunities since the beginning of the school year. Ms. Gallegos and Ms. Damara both emphasized that parents regularly inquired about the availability of these classes, which they interpreted as evidence of parents' desire to engage with the school and build skills that support their children's education.

Half of the school personnel interviewed also mentioned the family engagement team, and nearly all the school personnel interviewed were aware of the monthly family events. Both mathematics teachers referenced a science night held the previous year and noted that parents attended. Mr. Damara added that parents often shared positive feedback informally as they exited these events, suggesting that families who joined these events viewed these experiences favorably. Collectively, these accounts reflect school personnel's perspectives that Latinx and other minoritized parents respond positively to engagement opportunities that are accessible, relevant, and community-oriented.

Parent Conferences, Student Data, Volunteering, and Access to School Personnel. In relation to the parent involvement school structure outlined in the school-parent compact, interviewees emphasized parents' access to school personnel rather than the school's formal events. Except for Mr. Marshall, all five interviewees did not share about parent conferences or back-to-school nights. Mr. Marshall, a mathematics teacher, noted that overall attendance at such events tends to represent a small proportion of the parent population, though he contextualized this pattern within families' work and caregiving responsibilities:

When we hold events, we get very low participation rates in this community... A lot of the parents are doing multiple jobs, and they just don't have the time to get here. But I was pretty thrilled at back-to-school night to have about 25 parents show up for my 150-plus kids.

Similarly, school personnel described student data—such as progress reports and report cards—as a primary catalyst for parent–school interaction. Mr. Marshall explained that parents are often motivated to reach out after reviewing academic reports, particularly when concerns arise. He alluded to desiring more parental involvement before receiving the report cards: “It would be great if more parents were involved. Most of the time, it’s after the fact. They get a report card, ‘Oh, my son’s failing.’ ... What can you do? What can I do as a parent?” From the school personnel’s perspective, these interactions indicated that parents are attentive to their children’s academic progress, including in mathematics. Although engagement is mostly reactive, at least one teacher expressed a desire for proactive engagement.

School personnel also described multiple opportunities for parental involvement in volunteering but noted limited clarity around how parents navigate these options. Ms. Gallegos identified the administrative assistant as the primary point of contact for parents interested in volunteering, while Ms. Damara noted that parents could assist in various settings, such as the

cafeteria, classrooms, office, or monthly events. However, she acknowledged limited familiarity with the specific structures guiding these opportunities. Although all of the school personnel interviewed were aware of the structure of the parent committees, none provided information about sustained parental participation in them. This absence suggests that these avenues may be less accessible, less frequently used, or not clearly communicated to families.

Across most interviews, the school personnel emphasized two-way communication as the most consistent and meaningful form of parental engagement. They described a flexible communication system in which parents contact teachers, counselors, or administrators based on their needs. School personnel similarly initiate contact when academic, behavioral, or attendance concerns arise. All school personnel interviewed noted that parent communication methods included email, phone calls, text messaging through the parent platform, newsletters, the school website, and written notices.

The school personnel highlighted the importance of supporting the large linguistically diverse parent population through various means. All the school personnel interviewed shared awareness that the online platform includes built-in translation features as well as the availability of translation services at major school events, such as back-to-school night. Given that Magnolia serves approximately 700 students representing 29 languages, translation is typically provided for the most commonly spoken languages (e.g., Spanish, Vietnamese, Swahili, Creole, Somali), with additional languages supported on an as-needed basis. Parents pick up the headset at the beginning of the event and can hear the translator on their headset while the event is conducted in English. School personnel described this linguistic access as essential to parents' ability to engage meaningfully with the school.

Summary. Overall, from the school personnel’s perspective, Latinx and minority parents were viewed as responsive to parental involvement initiatives when engagement opportunities were accessible, linguistically inclusive, and aligned with families’ capacities. While participation in formal events—particularly those related to mathematics—was often limited, school personnel consistently interpreted parents’ communication, responsiveness, and attendance at select activities as indicators of sustained interest and investment in their children’s education.

School Personnel’s Suggestions for Parent Involvement. Several school personnel offered suggestions for strengthening the school’s parent and family engagement structures. Two interviewees—a front desk staff member and a mathematics teacher—emphasized the need for a designated staff member to coordinate and oversee all parent and family engagement efforts. Mr. Lane, a mathematics teacher, highlighted the value of a centralized role, noting that when funding allowed for a family liaison in the past, parent engagement efforts were more coherent and accessible: “Having a person whose job is to facilitate and organize that whole side of it would help... it helps to have someone be the point person for all those things.”

School personnel also shared ideas for expanding the ways that parents can participate in school life. Drawing on her experience at the elementary level, Ms. Gallegos suggested monthly workshops where parents could help plan school events or assist with office and classroom needs. She also expressed a desire for greater awareness of ongoing parent initiatives, indicating that increased internal communication could help front office staff better support families seeking to be involved.

The school personnel further reflected on the importance of school climate and the school personnel's mindset in sustaining parent engagement. Dr. Hall emphasized creating a welcoming environment in which parents feel valued, and "welcome when they come in ... where they feel connected." Similarly, Mr. Lane advocated for an asset-based approach that recognizes parents' diverse capacities for engagement and avoids equating limited participation with disinterest. He stressed the importance of offering multiple avenues for involvement to ensure families are not excluded:

You can't be involved in this event, but maybe you can do this (other) one... We have different ways to engage with families and try not to leave anyone out ... even if they don't have time to respond at all, at least they've heard from us... At least they know that we're here, and they know that we are doing our best with their students.

Although Magnolia formally presents its Title I parent involvement policy once a year during back-to-school night, school personnel's reflections suggest a need for greater communication and shared vision among both parents and school personnel around how this vision is sustained throughout the year. From the school personnel's perspective, making engagement structures more visible and coordinated may help parents who express interest in volunteering better understand how they can contribute, thereby strengthening the culture of parent and family engagement over time.

4.3.3 School Personnel on Parental Involvement in the Mathematics Program

From the school personnel's perspective, Latinx and minority parents' involvement in mathematics education varied largely by individual teacher practices rather than by a coordinated, schoolwide approach. School personnel described parents as responsive to outreach

when clear support was provided, particularly during the COVID-19 pandemic, but noted that engagement focused on mathematics remains limited.

Mr. Marshall remembered that during COVID-19 remote learning, some parents directly contacted him for guidance on supporting their children's mathematics learning at home. He described meeting with parents via Zoom to explain instructional strategies and review content: "I'll try to go over the same things that we go over with the kids." These interactions were interpreted by Mr. Marshall as evidence that parents were willing to engage in mathematics when instructional expectations were transparent and support was accessible.

Similarly, Mr. Lane described efforts to involve parents by sharing curriculum-based resources through the Amplify Desmos program, the school's communication system. He explained that each unit in his 8th-grade class includes family resource materials outlining key concepts, vocabulary, and strategies for supporting students at home. These resources are distributed through Amplify Desmos, which allows parents to remain informed about classroom learning regardless of whether they can attend school-based events. Despite these individual efforts, school personnel across roles confirmed that Magnolia currently does not offer mathematics-specific workshops or family events. Mr. Marshall noted that the school has not hosted a math night in over a decade.

Mathematics teachers and administrators also identified several challenges to engaging parents in mathematics, including historically low participation rates and parents' limited confidence with mathematics content. Mr. Marshall observed that when parents do engage academically, it is uncommon, noting, "In general, I would say most of them are not able to do the mathematics that their kids are doing." From his perspective, parents' lack of familiarity with

current instructional approaches was perceived as a barrier to parental involvement in mathematics.

Although Mr. Lane expressed interest in offering mathematics workshops or a math night, he also acknowledged that academic engagement is often more difficult to initiate than communication about behavior or attendance. He noted: “It's less easy to engage in things like, 'here's this math we've been learning, and here's how you can help us with it, or here's how we could use your help with the math.’” He further explained that conversations about mathematics feel unfamiliar and harder for both teachers and parents, and lack a clear framework:

There's no template for it. It's like, ‘Where do we start? What would we even do? And then also from the parents' side ... they feel like they can't help their kids with math because they don't remember the math they learned in school. It makes it a little harder.

These comments expressed that school personnel, at least Mr. Lane, recognize that the school needs to strengthen their capacity to engage parents in discussions about the mathematics education of their children.

Another challenge to engage parents in academics is the lack of a shared vision on how to carry it out. Administrators emphasized that the school’s current priority is building trust and community with families before increasing academic engagement, particularly in mathematics. Mr. Damian, the vice principal, explained that community building is viewed as a necessary precursor to academic partnerships: “[It's] putting community building first and then building a level of comfort with parents so that we can engage on an academic level.” However, Mr. Lane suggested that mathematics-focused events could themselves serve as community-building opportunities, stating that shared academic experiences can strengthen relationships among students, families, and teachers: “It's cool to get everyone together, do things, and no matter what

the content of the event is, it's a cool community thing.”

Notably, school personnel’s perspectives aligned with parent suggestions shared in interviews. Both teachers and parents identified the need for clearer instructional guidance, translated materials, and mathematics workshops to support learning at home. Mr. Marshall shared that, as teachers, they “could do a better job of preparing parents for what their kids are going to bring home for homework.” Similarly, Ms. Damara and Mr. Lane noted that mathematics workshops could help parents as well. Ms. Damara, the front desk staff, mentioned it could help them relearn content that has changed since they were in school, enabling them to better support their children: “They're also learning math because math has changed from the time [they] learned math...It will help the parents be able to help the students when they're at home.” Mr. Lane mentioned that these mathematics workshops are a practical step the school can take to bring parent involvement in academics.

Despite these shared interests, the school personnel interviewed described parental involvement in mathematics as largely reactive rather than proactive. As one mathematics teacher summarized, parents are more likely to engage after academic difficulties arise rather than through ongoing participation. Additionally, the teachers identified structural constraints that limit the implementation of mathematics-focused family engagement. Mr. Lane, for example, highlighted faculty shortages within the mathematics department and the lack of dedicated faculty or staff to plan and facilitate workshops, noting that teachers currently lack the capacity to take on additional responsibilities. From the school personnel’s perspective, this pattern of limited parental involvement in mathematics reflects not a lack of parental interest but a combination of structural barriers, limited confidence in mathematics, and the absence of sustained, schoolwide opportunities for meaningful involvement in mathematics education.

4.3.4 School Personnel on Parents' Funds of Knowledge

Drawing on Moll et al. 's (1992) concept of funds of knowledge, school personnel described Latinx and other minoritized parents as drawing on a range of household, community, and experiential resources to support their children's learning. From the school personnel's perspective, these funds of knowledge were most visible when families accessed community-based academic supports, leveraged flexible work arrangements, or engaged in culturally grounded networks to support students' educational needs.

Across interviews, the school personnel identified several community networks that families commonly draw upon for academic support: public libraries, community centers, churches, and county office of education services, particularly for students with IEPs. Mr. Damian, the assistant principal, noted that counseling teams play a key role in connecting families to these resources, emphasizing that academic support is often coordinated through both on-site and off-site partnerships: "The counseling teams do a really good job of helping parents get connected with things on and off-site in terms of academic support." From a funds of knowledge perspective, school personnel interpreted parents' use of these networks as evidence of families' existing knowledge of community systems and their ability to navigate institutional resources on behalf of their children.

The school personnel interviewed also described instances in which school personnel intentionally drew on parents' funds of knowledge to support academic programming on campus. For example, Paola, a parent, recounted how, in an encounter related to her daughter's attendance, the administrative assistant recognized her flexible work schedule and interest in literacy and invited her to lead a lunchtime garden reading club—an initiative she had struggled

to find someone to do: “Magnolia was trying to do a garden reading, and I think reading is very important ... My schedule at work is flexible ... They didn't have anybody; no volunteers to do it. So I said I can do it.” From the school personnel’s perspective, this interaction illustrates how recognizing parents’ skills, schedules, and prior experiences can create opportunities for meaningful academic involvement. Although it seems typical of volunteer roles, through time and sustained efforts, these experiences could extend beyond traditional volunteer roles.

However, school personnel acknowledged that opportunities for families to draw on their funds of knowledge were often constrained by front desk staff’s limited awareness of what families could offer, as well as by uneven communication across different personnel roles. Although Dr. Hall described intentionally partnering with community organizations to support students and families, these partnerships were not always known to front desk personnel or mathematics teachers. The principal emphasized the importance of aligning partnerships with the needs of students, school personnel, and families, stating: “When I partner with organizations, I try to have it connected to something that’s happening with students, with [school personnel], and then with families.” Nonetheless, the limited dissemination of information about these resources may restrict families’ ability to access and activate them, particularly given that front desk staff, and sometimes teachers, are often the parents’ primary point of contact.

School personnel further suggested that expanding the range of available resources could better support families’ diverse needs. Mr. Lane advocated for offering multiple forms of support to ensure families can draw on resources that align with their circumstances, explaining the importance of “having all different resources so that whatever the family needs and student needs... there’s something in place to help with that need.” From a funds of knowledge perspective, this reflects an understanding that families possess varied forms of expertise and

require flexible structures to engage meaningfully in their children's education, including in mathematics.

Overall, from the school personnel's perspective, Latinx and other minoritized parents were perceived as actively drawing on community knowledge, work-based skills, linguistic resources, and institutional navigation strategies to support academic learning. However, they also recognized that the school could intentionally nurture these funds of knowledge by improving internal communication, soliciting parent input through surveys or conversations, and designing engagement opportunities responsive to families' lived experiences. Such efforts may enhance families' ability to leverage their existing knowledge in support of both general academic involvement and mathematics education.

4.3.5 Parents Shaping Parent Involvement

From the parents' perspective, parent involvement at Magnolia is not only something they participate in but also something they actively shape through their ideas and collaboration with school personnel. Parents described feeling empowered to propose activities that reflect their interests, cultural practices, and perspectives on what could benefit students, and they emphasized the importance of administrative openness to these ideas.

For example, Maria described how a school-wide food event emerged directly from a parent's suggestion. After expressing interest in hosting a potluck to share food and build community, the parent received encouragement and support from the administrative assistant. This support led to collaborative planning among parents: "One parent brought it up... she said this to the administrator, who told her that it would be awesome. And I told her, 'I'll help with that [too].'" Maria further explained that parents took an active role in organizing the event,

including making phone calls and coordinating contributions, illustrating how parents drew on their social networks and organizational skills to support school engagement. She also described how these events led to informal conversations with school personnel about future activities, suggesting that parental involvement is an ongoing, relational process rather than a one-time effort: “After this activity...we’re going to talk to see what other events we can do for the general classrooms.”

Parents also described initiating activities, with administrators' support, aimed at supporting students' daily routines and well-being. Maria shared an example of a water bottle initiative designed to encourage hydration and responsibility among students. She explained how parents collaborated with teachers and administrators to implement the activity, with families contributing materials and time while the school provided additional resources: “This is also part of the family engagement where we want the parents to know that they can come and participate in the school setting as well.” From her perspective, these experiences reflect a form of engagement in which families are not passive recipients of school-led initiatives but active contributors who draw on their own ideas, resources, and knowledge to support students and strengthen the school community.

4.3.6 Magnolia Middle School Personnel Summary

School personnel at Magnolia described parental involvement as motivated primarily by logistical needs, academic monitoring, and concerns about students' well-being. Administrators articulated a vision of family engagement, similar to the language used in the school documents, emphasizing community-building and trust as foundations for deeper academic partnerships. However, teachers and front office staff did not seem familiar with the written parent

engagement plans or frameworks; rather, they described parental involvement efforts through day-to-day communications. School personnel also identified structural barriers — work schedules and childcare responsibility — as constraints limiting parents’ participation in school events. In mathematics education specifically, parental involvement was dependent on individual teachers’ practices, not on a coordinated schoolwide strategy. Both teachers and front desk personnel commented that parents have limited familiarity with mathematics instruction or concepts and noted the absence of math-focused family workshops. School personnel also noted that parents draw on their funds of knowledge — community resources, and linguistic networks — to support their children’s learning. They also suggested that stronger coordination, responsive parent-school communication, and hiring dedicated staff could help leverage these resources and expand parent involvement in both general academics and in mathematics education.

4.4 Magnolia Middle School Case Conclusion

Taken together, parents’ and school personnel’s perspectives reveal both alignment and key differences in how parental involvement is understood and manifested at Magnolia Middle School. Both groups recognized that parents care deeply about their children’s education and that aspects of families’ everyday realities—work schedules, childcare responsibilities, and other family obligations—limit and shape parents’ ability to participate in school events on campus. However, while parents described responding strategically to the school’s parental involvement plans—engaging in culturally meaningful activities, communicating with teachers, and participating when opportunities aligned with their circumstances—school personnel often interpreted parental involvement primarily through visible participation in on-campus events,

without always acknowledging other forms of engagement occurring outside the school.

Interviews with parents also revealed that they hope their involvement will positively influence their children's academic progress both in the present moment and long term. In addition, some parents expressed a desire to reshape or redefine what parental involvement could look like within the school community.

Interviews with both parents and school personnel further highlighted that families draw on diverse funds of knowledge—community resources, linguistic networks, organizational skills, and advocacy efforts—to support their children's education. Although both groups acknowledged these resources, the school's existing policies and engagement structures provide limited opportunities to intentionally recognize or leverage them. As a result, parental participation, particularly in mathematics education, remains constrained and often dependent on individual initiative rather than coordinated school structures. The absence of mathematics-focused family engagement opportunities and sustained spaces for teacher–parent collaboration limits the extent to which parents' knowledge and experiences can inform, for example, the mathematics program. These findings suggest that expanding family involvement at Magnolia may require more intentional efforts to recognize and build upon families' existing resources in order to broaden and deepen opportunities for meaningful parental involvement, including in mathematics education.

Chapter 5: The Case of Pacific Charter School

Chapter 5 explores the case of Pacific Charter School, an ethnically diverse, grades 6–12 charter school affiliated with Darwin University (DU) that primarily serves low-income students from linguistically and culturally diverse parents who did not attend college. The student population is largely Latinx, African American, and Asian, drawn from neighborhoods across the city. The school’s mission is to increase college attendance at DU among linguistically and culturally diverse communities, and it has been recognized for strong academic performance at the district, state, and national levels. Nearly 100% of students qualify for free or reduced-price meals, and many come from families in which parents or guardians did not complete high school. Families from across the region apply to enter the school via lottery, and parental education and income information is required during the application and admission processes.

To examine how parents and school personnel conceptualize parental involvement at Pacific Charter, this chapter first analyzes the institutional structures designed to support parent engagement. It begins with a review of how parental involvement is framed in key school documents. The chapter then examines parents’ perspectives on involvement within these structures and how they describe their roles, both broadly within education and in relation to mathematics education. The final section analyzes the school personnel’s perspectives on parental involvement, highlighting areas of alignment and tension between institutional expectations and lived practices.

5.1 Overview of Major Points in Pacific Charter School Key Documents

Seven key school documents were analyzed to determine how each describes the model for parental involvement at Pacific Charter: 2023–2024 and 2024–2025 Local Control and Accountability Plan (LCAP); 2023–2024 School Accountability Report Card (SARC); Home-School Compact and Student Handbook; 2023 Accreditation Report; and 2024 Pacific Charter Dashboard Report. These documents describe Pacific Charter as a college-preparatory charter school that emphasizes academic rigor as the primary pathway to four-year university success for first-generation students from linguistically and culturally diverse communities. The 2023–2024 and 2024–2025 LCAP Annual Updates outline school goals, progress, and budget priorities. The 2023–2024 SARC aligns with LCAP goals and identifies opportunities for parental involvement. The Home-School Compact and Student Handbook define shared responsibilities and clarify parents’ roles in supporting student learning. The 2023 Accreditation Report details the school’s commitment to high-quality education and ongoing parent engagement, while the 2024 Pacific Charter Dashboard Report, from the state, provides data on student outcomes and Parent and Family Engagement. The Dashboard and SARC reports emphasize the school’s mission to support low-income and first-generation students, with admissions determined by lottery and priority given to these populations. The 2024–2025 LCAP identifies four broad goals to improve student achievement, including building a school culture of community and collaboration among parents and school personnel. Pacific Charter defines each of their responsibilities in the 2024–2025 Home-School compact and emphasizes communication among the school, families, and community in the LCAP. The 2023–2024 SARC outlines parent engagement and volunteer opportunities. The following section focuses on the home-school compact and the SARC documents.

5.1.1 Home-School Compact

The 2024-2025 Home-School Compact is a document that outlines the roles and responsibilities of administrators, teachers, parents, and students in supporting family engagement. According to the Home-School Compact, administrators are responsible for creating a welcoming environment for families, maintaining regular and direct communication about school and learning issues, and ensuring that parents have opportunities to be involved in decision-making processes. Teachers contribute to this effort by fostering a welcoming environment for families and offering opportunities for parents to volunteer, observe, or participate in the classroom. Teachers maintain open communication through frequent progress reports, prompt notification of concerns to parents, scheduling parent-teacher conferences, returning parent calls, and remaining reasonably available to families. Students are expected to understand the importance of parental involvement in both school and education and to recognize the role that families play in supporting their academic success. The parents' responsibilities outlined in the Home-School Compact are listed below in Table 5.1; responsibilities are grouped by categorization of parent role. The bullet points are the parent/guardian responsibilities outlined in the Home-School compact. The categories on the left were added to consolidate similar parent and guardian responsibilities, a move that supports their later analysis through the parent-involvement conceptual framework.

Table 5.1: Home-School Compact from Pacific Charter

Categories	Parent/Guardian responsibilities
Ensure students' daily attendance and active participation	- Ensure the student goes to school daily, on time, and prepared to learn - Plan family vacations around the school calendar - Know and support school/classroom rules and attendance plans
Monitor students at home	- Hold high expectations and regularly monitor students' progress at home - Provide regular (quiet) time, place, and supervision for homework completion at home - Read to the child and ensure the child reads daily for pleasure - Limit students' screen time and encourage students to use their out-of-school time positively
Participate in relevant decisions	- Participate in decisions related to the education of the child - Attend the parent-teacher conference as requested - Be available and return teacher calls promptly
Maintain communication with teachers/counselors	- Contact teachers/counselors about concerns/problems promptly - Understand students/parents' rights and responsibilities.
Stay informed	- Earn a minimum of 15 participation points per school year (1 participation point = 1 hour)

Although a minimum participation-point requirement is listed in the documents, I learned during my visits that the requirement is no longer enforced. One teacher shared that the requirement was discontinued approximately three years ago after it was deemed illegal. Since then, parent participation has shifted from a mandate to an encouragement, with families invited—but not required—to engage in school activities and events as much as possible.

5.1.2 SARC Engagement Goal: Parental Involvement

In the 2023-2024 SARC document, Pacific Charter outlines parental involvement opportunities for the 2024-2025 school year. There are various engagement opportunities and volunteer activities outlined throughout the year, such as the monthly parent meetings and PTA

board meetings. Additionally, there are other consistent yearly events and various volunteer opportunities, such as weekly PTA fundraising events or participation in a school committee. Lastly, according to the school document, Pacific Charter provides real-time access to student data through an online grading system, so parents can receive relevant, timely updates and contact teachers accordingly.

Monthly Meetings and Yearly Events. The 2023 WASC report outlines how the PTA organizes two types of monthly meetings held on campus: the PTA board meetings and the parent workshops. The PTA board meetings are meetings where the PTA board and the administration discuss the PTA goals and projects; parents also give input for the Principal's Report shared at these parent meetings. In comparison, the monthly meetings provide all parents with various school volunteer and PTA updates. There is a different theme for each discussion at these meetings, and these themes often revolve around topics such as mental health, substance abuse, health screening, and college preparation. Guest speakers, including school personnel and community members, offer additional resources. The 2023 WASC report outlines that these meetings have an average of 150 parents in attendance each month, which makes it an effective way for school personnel to communicate with a significant number of parents monthly. Spanish and Vietnamese interpretations are provided at every meeting.

The 2024 SARC document also outlines a range of parent volunteer opportunities. It notes that Pacific Charter encourages parents to participate in activities like serving on school committees, chaperoning field trips, assisting with teacher or school personnel appreciation events, and supporting other in-school activities. The document indicates that the PTA organizes weekly fundraising events to support school programs and encourages parents to take part in these efforts. The 2024 SARC document also outlines other yearly events happening throughout

the year. New and existing families are invited, for example, to join different yearly events that fulfill different purposes. New families are invited to the yearly enrollment and orientation day, which happens before the school year starts. The orientation day is an opportunity for families of the newly enrolled students to learn about school policies and meet the school personnel. Existing families are invited to join various yearly events such as college workshops, multicultural potluck celebrations, spring learning presentations, or community health fairs. The multicultural celebration is a school-wide potluck event where families bring a cultural dish to share and watch students' performances that showcase the diversity of the school. The spring learning presentations are a yearly opportunity for students to showcase two of their favorite projects and formally present them to their parents.

Real-Time Student Data and Updates. The 2024–2025 LCAP update emphasizes the school's commitment to improving communication accessibility for families and community members through expanded translation services, more user-friendly digital platforms for non-English speakers, regular and accessible updates on academic progress and school events, and systematic efforts to solicit parent feedback. Consistent with this focus, the 2023–2024 SARC document highlights the use of online parent platforms that provide real-time access to student data, enable direct communication with teachers, and offer built-in translation features to support multilingual families. The 2023 WASC report further documents the school's partnership with translation companies/non-profits to provide interpretation and translation services for PTA meetings and written communications. Together, these documents portray communication access as a central strategy for parent engagement. However, while Pacific Charter reports annual efforts to gather parent feedback, the process—coordinated by the volunteer coordinator—is not

clearly specified, raising questions about the consistency and reach of these feedback mechanisms.

5.1.3 Pacific Charter Key Documents: Summary

Parental involvement at Pacific Charter is described as a structured and school-directed model centered mainly on college readiness for first-generation and diverse student populations, which is the intended student population of the school. Across the key school documents identified above, Pacific Charter highlights clear roles for parents in ensuring attendance, monitoring learning at home, maintaining communication with teachers, and participating in school activities. While earlier expectations for mandatory participation have shifted to “encouraged participation,” Pacific continues to rely on organized opportunities such as monthly meetings, workshops, volunteer roles, and annual events. Communication is positioned as a central strategy, with real-time academic data access, multilingual support, and regular updates designed to keep families informed and involved. This focus on communication seems to be important in a school that is not as easily accessible to most families. Overall, these documents reflect a comprehensive but largely school-defined approach to parent engagement, while revealing inconsistencies in how all families can access involvement opportunities. The Pacific Charter parent involvement plan is summarized in Figure 5.1 below.

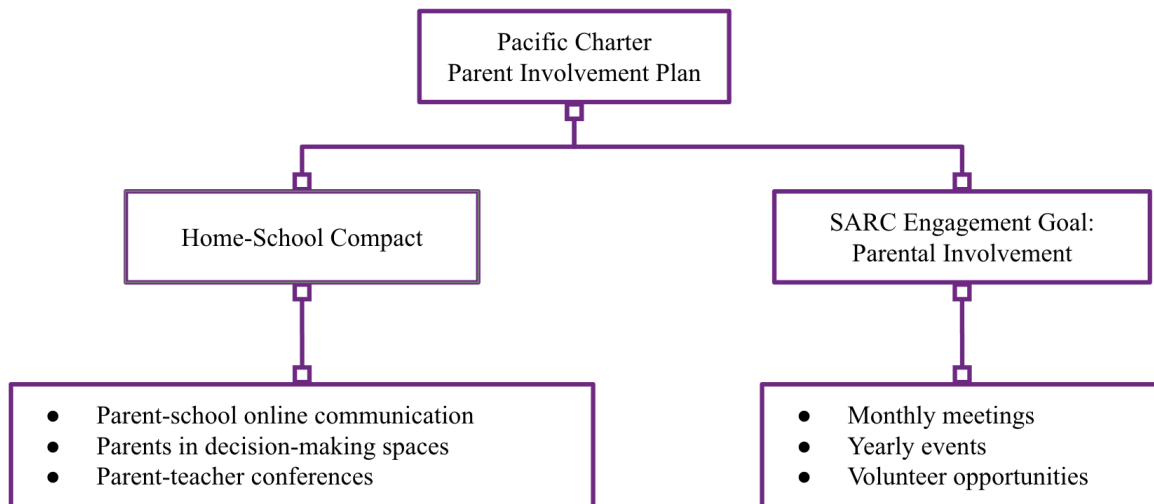


Figure 5.1: Pacific Charter Parent Involvement Plan

5.2 Parents' Perspective

The second section of this chapter explores how parents describe their role at Pacific Charter, which addresses RQ2. Initially, I describe the reasons and challenges for parental involvement. Then, I describe how parents respond to the structure outlined in the school key documents, noting their reasoning or challenges for participating in these structures, which addresses RQ2-A. Next, I explore the parents' hopes and aspirations for their involvement at Pacific Charter, both in general education and in mathematics education. Finally, the last part explores how parents draw on their funds of knowledge to support their children academically, both in general education and in mathematics education. For this dissertation, 10 parents were interviewed: nine mothers and one father; nine identified as Latinx parents and one as a mother from Spain. Table 5.2 below lists the pseudonyms of the parents interviewed, their role in the family, demographics, and their line of work.

Table 5.2: Parents Interviewed at Pacific Charter

Parent	Role	Demographics	Work
Yuliana	Mother	Latinx	Stay-at-home parent
Susana	Mother	Latinx	House cleaner
Sonia	Mother	Latinx	Caregiver
Marisol	Mother	Latinx	Apts Cleaner/Set-up
Fabiola	Mother	Latinx	House cleaner
Emma	Mother	Latinx	Medical Assistant
Diego	Father	Latinx	County OHR Specialist
Carolina	Mother	Spaniard	Medical Translator
Anna	Mother	Latinx	Stay-at-home parent
Aurora	Mother	Latinx	House cleaner

5.2.1 Reasons & Challenges for Parent Involvement

Parents articulated strong motivations for engaging in school events and activities, primarily rooted in their desire to support their children’s academic success and well-being. All parents interviewed expressed an interest in being involved in their children’s education; eight of them mentioned the importance of staying informed about school resources and building and maintaining trust and communication with teachers. Anna, for example, described parent–teacher communication as essential for her to understand how to support her child’s strengths and areas of need, stating that *“tener una conexión con los maestros es esencial para saber cómo ayudarle en la escuela al niño y saber sus áreas fuertes y en donde necesita apoyo”* (having a connection with the teachers is essential to knowing how to help our child at school). Similarly, Carolina emphasized that her involvement was driven by a desire to understand how the school operates and to feel confident that her children are safe and well supported at Pacific. She highlighted trust-building with school personnel as a key motivation for her engagement: *“Quiero ver cómo de involucrados están todos los que trabajan ahí con nuestro hijo y con los problemas, para*

quedarme tranquila de que están en buenas manos” (I want to see how involved everyone who works there is with our child and with any problems, so I can rest assured that they're in good hands). These perspectives suggest that parental involvement is heavily motivated by understanding the culture of the school and how best to support their students at home.

Parent involvement was also viewed as a collaborative effort between families and the school. Marisol, for example, described how student success requires a team-based approach: *“Hay una participación de los dos lados: del comité de padres y de los maestros ... Al final, todo debe ser como un equipo para sacar adelante a los estudiantes en diferentes situaciones académicamente”* (There's participation from both sides: the parents' committee and the teachers ... Ultimately, everyone needs to work as a team to help the students succeed academically in different situations). These perspectives suggest that parents view involvement not merely as attendance at events but as relational engagement grounded in communication, trust, and shared responsibility for student outcomes.

Despite a strong interest in participation, parents identified several barriers that limited their involvement. Language emerged as a primary challenge, particularly for participation in the PTA board and its meetings, other general parent meetings, or in other school events. Two of the seven parents who are most comfortable speaking Spanish commented on avoiding formal leadership roles due to discomfort speaking English in front of others. Instead, they opted for behind-the-scenes volunteer work. Sonia, for example, declined PTA board participation because meetings were conducted in English and she did not feel able to express herself publicly:

Yo no sé hablar inglés enfrente de la gente... Por eso no me quiero apuntar. Dicen que falta una secretaria y que falta no sé qué y entonces dije no. No voy a saber expresarme enfrente del público. (I can't speak English in front of people. That's why I don't want to sign up. They said they needed a secretary and

something else, and I said no, I wouldn't be able to express myself in front of an audience.

Sonia is an example of a parent with the desire to be involved in the school's decision-making processes, yet a language barrier prevents her from doing so.

A stronger communication between parents and school can potentially lead to an exploration of how to accommodate these parents in decision-making spaces. Since Sonia was not aware of accommodations, her desire to get involved was channeled into house-cleaning contributions: "*Aunque sea ayudo a vender o acomodar ahí o a limpiar cuando recogen cosas*" (I could at least help them sell things, or set things up, or clean up when they're packing things away). Similarly, Fabiola shared that she stopped joining school meetings due to the language barrier and scheduling conflicts with her work: "*Muchas veces los eventos son completamente en inglés, y a veces no voy porque no voy a entender todo*" (Many times the events are entirely in English, and sometimes I don't go because I won't understand everything). These comments indicate that language and scheduling conflicts are primary challenges for meaningful parent involvement. If the parent population can make limited contributions due to work scheduling, then Pacific Charter should ensure that whatever contributions those parents make are meaningful and substantial. There is nothing wrong with parents helping to clean or pick up things, but it should not be the only things they are able to contribute because the school has not accommodated their language abilities.

Parents also described challenges when advocating for their children in response to school-level issues. Aurora recounted repeated attempts to seek information and resolution regarding prolonged teacher turnover, expressing frustration with what she perceived as a lack of communication and accountability. Her son's science teacher was fired about a year ago. As a

result, her son's grades were not adequately prepared for the yearly science exhibition and her son was disappointed. Throughout the year, she went to the front office to ask for information, to no avail. In one conversation, she was told: "*Que no era su asunto, que eso no me corresponde a mí*" (That it wasn't their business, that it wasn't my responsibility). She told them that the same situation had happened with three teachers, and her son had not learned much the year before due to prolonged teacher turnover. Aurora's experience highlights how institutional communication—or the absence of it—can undermine parents' sense of agency and trust, even when parents actively seek engagement, a point to which I return in the next chapter.

Finally, work schedules and transportation constraints further limited parents' abilities to attend school events, particularly those held during the school day or early evenings. Two parents noted that while they could not attend in person, they remained engaged through online communication platforms and direct contact with teachers as needed. Fabiola, for example, mentioned that she would love to attend the decision-making meeting in the mornings, but is unable due to her work schedule. Overall, these findings indicate that parents are highly motivated to be involved but encounter structural and linguistic barriers that shape the forms of involvement available to them, often narrowing participation to less visible or less influential roles.

5.2.2 How Parents Respond to Pacific Charter School Parent Involvement Structures

This section examines how parents perceive and engage with the formal parent involvement structures at Pacific Charter, including monthly parent meetings, yearly school events, volunteer opportunities, and online communication platforms. Overall, parents

demonstrated high interest in engagement but navigated these structures selectively, based on accessibility, language, scheduling, and perceived relevance.

Monthly Meetings. Most parents (seven of 10) mentioned attending monthly parent meetings, indicating that these meetings function as a primary site for family–school interaction. Parents described these meetings as organized by the PTA and focused on topics such as academic progress, school resources, student safety, and the school’s educational philosophy. Parents noted the presence of teachers, administrators, and students, suggesting that these meetings foster a sense of collective participation. Several parents also recognized that these meetings serve as a space for announcements about volunteer opportunities and PTA announcements. While some parents paid the PTA fee, they did not necessarily view themselves as active PTA members, highlighting a distinction between financial contribution and participatory involvement.

Parents generally viewed the availability of Spanish and Vietnamese interpretation at monthly meetings as a positive and inclusive feature. Five parents commented that using the interpretation headsets allowed them to access information despite language differences, which contributes to their continued attendance. However, access to interpretation was not consistent across all involvement structures. Three parents shared that the PTA board meetings were conducted primarily in English and involved limited participation from non-board members. These meetings were also scheduled monthly on a weekday during work hours. Sonia’s experience illustrates how language exclusion shaped disengagement; although she attended a PTA board meeting with the expectation of interpretation, the absence of language support and limited opportunities to participate led her to leave early:

Pues no le entiendo, pero nomás voy, a lo mejor hay un traductor o [usan] audifonos como en los sábados, pero no... Como no entiendo, no más que quedarme ahí sentada ... Todavía no se acababa la junta de la mesa directiva; estaban hablando y hablando. Dije, pues, ¿qué hago aquí? Mejor me voy porque no les entiendo. (I don't understand them, but I'll just go anyway; maybe there will be a translator or [use] headphones like on Saturdays, but no... Since I didn't understand anything, I just sat there ... The board meeting wasn't even over yet; they were still talking and talking, and I thought, "What am I doing here? I'd better leave because I don't understand them."

Sonia's experience suggests that while monthly meetings are structured to be broadly accessible, PTA leadership spaces remain less inclusive and may inadvertently restrict parent voice.

Yearly Events. Eight of the parents interviewed attend yearly events such as back-to-school night, orientations, fundraising activities, and multicultural celebrations. Parents framed their participation as an expression of commitment rather than obligation, emphasizing that they go "when possible." These events were viewed as more flexible and relational than formal meetings, allowing parents to engage without the linguistic and procedural barriers associated with PTA governance. Parents' involvement suggests that informal school events may serve as more accessible entry points for involvement, particularly for families balancing various work schedules and language constraints.

Real-time student data access and school updates. Nearly all parents (nine out of ten) relied heavily on the school's online platforms to monitor grades, communicate with teachers, and receive school updates. Parents described these platforms as essential tools for maintaining involvement when in-person participation was not feasible. These parents shared that they use the online platform to identify missing assignments and communicate directly with teachers, interpreting timely teachers' replies as evidence that teachers cared about their children's academic success. Diego, for example, mentioned: "*Se mira que sí les importa la educación de*

sus estudiantes porque me responden a mis mensajes con mis dudas y preguntas” (It seems like they do care about their students' education because they respond to my messages with my doubts and questions). Others used the platform primarily for monitoring purposes and did not initiate communication unless concerns arose. Parents’ relying on student data access and monitoring without initiating communication is a form of parental involvement that is easy to overlook and dismiss as uninteresting. There are many reasons why parents do not initiate communication, but that does not necessarily mean they are not invested in their child’s education or stand ready to assist if the need arises.

Parents also valued the platform as a source of school-wide information, including tutoring opportunities, summer programs, and PTA updates. For parents unable to attend monthly meetings, access to shared presentation slides allowed them to remain informed: “I do have a lot on my plate, so if I don't attend the meetings, I can skim through the slides that they send.” However, parents raised concerns about language accessibility, noting that most online communications appeared to be in English only. This uneven translation limited full access for some families and reinforced reliance on selective forms of engagement.

Parent-School Relationships Built on Trust. The 10 parents interviewed identified a range of school personnel as points of contact, including administrators, counselors, teachers, front office, and support staff. Decisions about whom to contact were shaped by the nature of the concern and language accessibility. Parents who required Spanish-language support shared that it was difficult to identify appropriate personnel, underscoring gaps in linguistic responsiveness. Despite these challenges, parents like Yuliana, emphasized that the manner in which they were treated when seeking assistance shaped their perceptions of the school:

Esa es una de las cosas que yo siempre valoro de una escuela, el trato que te dan ya sea en la oficina con las personas porque yo así sé cómo tratan o cómo a mis hijas, porque así como yo educo a mis hijas. (That's one of the things I always value in a school: the way they treat you, whether it's in the office or with the other people, because that's how I know how they treat my daughters, since that's how I raise my daughters).

Respectful interactions were interpreted as indicators of how the school valued and cared for its children. In different ways, the interview with parents indicated that respectful interactions shaped the nature of their involvement as well as the school personnel they interacted with. As a parent myself now, it makes sense that parents are drawn to the individuals who share the same sense of responsibility for the education of their children, but also treat me with decency and respect, as the primary educator of my own children.

Taken together, these findings indicate that parents actively engage with the involvement structures they perceive as accessible, responsive, and respectful. While Pacific Charter provides multiple avenues for engagement, parents' participation is unevenly distributed across the school structures. Monthly meetings and online platforms function as primary modes of involvement, while decision-making spaces such as PTA board meetings remain less accessible due to language and time constraints. Parents' responses to the structures at Pacific Charter highlight both the strengths of existing structures and the need for more inclusive, linguistically responsive approaches that recognize varied forms of parent engagement.

5.2.3 Parents' Hopes and Aspirations

This section explores parents' hopes and aspirations for their involvement at Pacific Charter, both in general education and in mathematics education. One aspect of parents' aspirations of their involvement stems from why they chose to send their children to Pacific Charter in the first place. Most parents described choosing Pacific Charter because they believed

it would provide strong academic opportunities and support long-term success, particularly college attendance. Several parents identified aspirations for their children to become first-generation college graduates. As Emma explained: “All I can do is hope to put my son on the right path and give him the right tools... This school seems like it puts you on the right path.” For Emma, and perhaps other parents, involvement functioned to support this trajectory by remaining informed, connected to teachers, and able to advocate for their children’s academic progress.

In addition to academic goals, parents emphasized safety and social environment as central to their school choice and involvement. Several parents contrasted Pacific Charter with other schools they perceived to be affected by bullying, instability, or unsafe conditions. Carolina noted, “*Decidimos en Pacific Charter no solamente porque tiene un rango muy alto en la calificación de los estudiantes, sino también porque no he escuchado ningún escándalo ... así como sí he escuchado de las demás escuelas*” (We chose Pacific Charter not only because it has a very high student rating, but also because I haven’t heard of any scandals there... unlike what I’ve heard about other schools). As parents became more familiar with the school community, feelings of belonging further reinforced their engagement. Carolina described a sense of alignment with other families that increased her confidence in the school:

Siento que (Pacific Charter) es mi lugar ... Me gusta mucho la Pacific Charter porque veo a las familias muy afines a nosotros ... son humildes como nosotros ... Tengo paz y tranquilidad de que mi niño sea amigo de niños que proceden de estas familias. (I feel like (Pacific Charter) is my place ... I really like Pacific Charter because I see the families are very similar to us ... They're humble like us ... I have peace of mind knowing that my child is friends with children from these families.

Beyond general aspirations for their children, three parents expressed hopes for their own involvement at Pacific Charter. Yuliana wanted more opportunities to build relationships with

school leadership, particularly administrators and the principal, rather than interacting primarily with front office staff. Emma and Marisol hoped for clearer and earlier communication about academic support so they could act proactively. Marisol explained: “*Me gustaría como cosas extra ... ayudas adicionales para yo inscribirlo para que participe*” (I would like some extra things ... additional resources to get him involved and participating). These parents viewed access to such information as critical for fulfilling their role as educational advocates.

Parents also raised concerns about recognition practices. Aurora observed that while the school provides support and motivation for students who struggle academically, students who consistently meet expectations may feel overlooked. This parent hoped the school would also acknowledge students, like her son, who complete their work consistently, so they do not feel excluded or undervalued. Such comments reflect parents’ broader aspirations for equity and balance in how effort and achievement are recognized.

Parents’ Hopes and Aspirations in Mathematics Education. Parents’ aspirations for involvement were particularly pronounced when I asked specifically about mathematics education. Nearly all parents (nine out of ten) expressed interest in parent workshops, with eight of them specifically requesting a mathematics parent workshop. They viewed these workshops as opportunities to better understand what students are learning so that they can support them more effectively at home. As Anna explained, “*Estaría bien para apoyarlos porque hay cosas en las que en la escuela, a lo mejor no les quedan claras. Si ocupan de un apoyo en casa*” (It would be good to support them because there are things that they might not fully understand at school. They need support at home). Some parents noted that such workshops could also support adults’ educational goals, such as preparing for a General Educational Development (GED).

Parents also emphasized the need for guidance on external resources and programs. Susana noted that while her child enjoys math, many students need additional encouragement and effective strategies: “*A veces yo no entiendo mucho cómo explicarle a él, pero sé que sí hay programas donde ellos pueden ver y mejorar sus matemáticas*” (Sometimes I don't quite understand how to explain things to him, but I know there are programs where they can learn and improve their mathematics skills). Beyond having additional academic support, some parents hoped that mathematics workshops could help shift negative perceptions of mathematics. Marisol described mathematics as intimidating and expressed a desire for more accessible approaches: “*Me gustaría que cuando se hablara de matemáticas, no se oyera como algo terrorífico Hay otras opciones para aprender matemáticas*” (I would like it if, when we talk about mathematics, it didn't sound like something terrifying... There are other options for learning mathematics).

Overall, parents' hopes and aspirations reflect a strong commitment to partnership with Pacific Charter. Parents viewed involvement as a way to support college aspirations, ensure safety, foster belonging, and strengthen home–school collaboration. Their calls for increased access to leadership, clearer communication, and mathematics-specific support suggest opportunities for the school to deepen engagement by building on families' motivation, values, and desire to support their children's learning.

5.2.4 Parents' Funds of Knowledge

The third part of the parents' perspective section explores how parents draw on their funds of knowledge to support their children academically, both generally and specifically in mathematics education. Drawing on Moll et al. (1992), parents in this study demonstrated

multiple forms of funds of knowledge—historically accumulated cultural, social, linguistic, and experiential resources—that they actively mobilize to support their children’s education. These cultural practices function as key funds of knowledge that shape how families, as a unit, organize learning and responsibility at home. Marisol explained this orientation as follows: “*Los Latinos, como familia, somos todos un equipo ... Nos apoyamos unos a otros. Cada quien está desempeñando el papel que le corresponde en casa*” (As Latinx, we are all a team as a family ... We support each other. Everyone is playing their part at home). Such family structures reflect a collective approach to child-rearing and education, where learning is viewed as a shared responsibility rather than an individual task. Parents’ narratives reveal that academic support extends beyond school-based structures and is deeply embedded in family practices, as well as in community resources and on social networks.

Community-Based Funds of Knowledge as Educational Resources. Families attending Pacific Charter come from across the county, and most of the students take public transportation to get to school. Table 5.3 below lists the distance each of the parents interviewed lives from Pacific Charter, with the average time of how long it takes the students to get to campus using public transportation.

Table 5.3: How Far Each of the Parents Interviewed Lives from Pacific Charter

Parent	Neighborhood	Miles from Pacific Charter	Public Transportation Travel Time
Yuliana	A	17 miles	1 hr
Susana	B	7 miles	45 mins
Sonia	C	23 miles	2 hrs
Marisol	D	20 miles	1 hr
Fabiola	D	20 miles	1 hr
Emma	B	7 miles	45 mins
Diego	E	15 miles	1 hr 30 mins
Carolina	B	7 miles	45 mins
Anna	E	15 miles	1 hr 30 mins
Aurora	F	10 miles	1 hr

Diego and Anna—whom I later learned are married after speaking with each of them separately—explained that their family has only one car. Anna drives Diego and their son to a trolley station near Diego’s workplace; from there, their son takes the trolley to and from Pacific Charter. Sonia shared that her family recently moved, and that using public transportation to reach Pacific Charter would take about two hours. Instead, she drives her daughter to and from school. She also tries to take her daughter to the downtown library, where a retired professor tutors her, even if they can only arrive about 30 minutes before the library’s closing due to traffic. By the time they return to their neighborhood, their local library is already closed, so Sonia finds it easier to go downtown to meet with the tutor, whom she has grown to trust.

The other parents did not describe their transportation arrangements, as this was not a specific interview question, so it is unclear whether they drive or use transit. However, based on the school’s location, key documents, and staff interviews, Pacific Charter serves families from a wide range of neighborhoods, many of whom commute from different areas. This was reinforced by Dr. Smith, the principal: “Our culture and climate come on the trolley and leave on the

trolley.” While all students either arrive by car or trolley, most use the trolley, which stops about 0.1 miles (a five-minute walk) from the school.

Aside from family-centered practices, parents also identified community spaces as important sources of academic support. Churches and libraries emerged as primary sites where families accessed tutoring, moral guidance, and information-sharing parent groups. Six parents mentioned the church as a source of moral guidance as well as a community resource and support. Yuliana, for example, said that church participation served both to reinforce moral values and to provide access to social networks that they relied on for information and mutual assistance:

Hay influencias en la escuela que no comparten los mismos valores ni la misma moral que yo les inculco, por eso acudo a la iglesia para que sigan por el camino que me gustaría que sigan ... Sé que en la escuela les dicen del respeto; yo en casa y con ayuda de la iglesia ... el respeto es más reforzado. (There are influences at school that don't share the same values or morals that I instill in them, so I go to church so they stay on the path I want them to follow ... I know they teach about respect at school, and I reinforce it at home and with the help of the church... Respect is reinforced even more.)

Three parents identified apartment-based programs, community and church youth programs, and community fairs as sources of academic enrichment. At the same time, two parents had limited awareness of community-based resources beyond those offered by the school. Although these examples illustrate how parents integrate moral, social, and educational goals through culturally meaningful spaces, it also highlights uneven access to information and opportunities beyond those offered at Pacific Charter.

Social Networks & Linguistic Resources as Educational Funds of Knowledge.

Parents frequently relied on community-based knowledge to navigate schooling decisions and academic opportunities. Anna and Diego learned about Pacific Charter through social networks,

demonstrating how local neighborhood events inform school choice. Anna noted: “*Mi esposo asistió a un evento comunitario donde supo de la escuela Pacific Charter ... Nos agradó mucho la escuela y decidimos mandarlo ahí*” (My husband attended a community event where he learned about Pacific Charter School ... We liked the school and decided to send him there). Anna and Diego responded positively to Pacific Charter’s efforts to recruit widely.

Linguistic resources within and across families also functioned as important funds of knowledge. Three parents leveraged bilingual family members to navigate school communication and professional contexts. Sonia described relying on her older daughter for translation during school events, while Yuliana explained how her daughter assists with translating for the family business: “*Yo le digo que escriba ... y ella me lo traduce al inglés. Yo me encargo de enviárselos a los clientes*” (I tell her what to write ... and she translates them into English. I take care of sending them to the customers). Another parent who drew on her linguistic resources was Carolina, who works as a professional translator for an independent company often hired by Pacific Charter to translate one-on-one teacher-parent meetings or school events. She mentioned that her indirect connection with Pacific Charter through her job allowed her to know more about the parent-school dynamics as well as the type of families that attend Pacific Charter. Carolina mentioned that she felt assured of her decision to send her son to Pacific Charter. These findings reflect adaptive strategies through which families address language barriers while maintaining engagement with institutions.

5.2.5 Drawing on Funds of Knowledge for Children’s Mathematics Education

Parents also drew on a range of mathematical and academic resources to support their children’s learning in mathematics. Most of the parents interviewed were actively engaged with

school-based support. Susana mentioned requesting additional help from the mathematics teacher; Emma and Fabiola mentioned enrolling their children in Saturday school when notified by their mathematics teacher of their children's academic struggles. Beyond school resources, parents also mobilized community networks to access tutoring and enrichment opportunities. Emma registered her child for mathematics tutoring through a nearby university, while Sonia described coordinating weekly mathematics tutoring at the library with a retired college professor: "*Aunque sea media hora, la señora es muy buena. Era maestra de universidad*" (Even if it's only for half an hour, the lady is very good. She was a university professor).

Aurora's account further illustrates parents' persistence and resourcefulness in navigating external academic programs. After learning about a mathematics program at a community fair, she applied for a scholarship that enabled her son to attend weekly mathematics classes:

Encontramos un estante de matemáticas; yo apliqué y pregunté los precios ... pero no estaba en mis posibilidades. Al año siguiente volvimos a la misma feria; [estaban] abriendo el primer año de becas. Gracias a Dios le dieron esa beca de matemáticas y todavía la tiene. (We found a math booth, and I applied and asked about the prices ... but it was beyond my means. The following year, we went back to the same fair, [they were] opening up their first year of scholarships ... Thank God they gave him that math scholarship, and he still has it).

Parents also drew on their own educational backgrounds as mathematical funds of knowledge. Seven parents had strong prior experiences in mathematics and actively assisted their children with homework. Diego, for example, recalled taking calculus in high school and mentioned how he occasionally helps his daughter whenever she needs help. Yuliana, another parent, mentioned that she used to love mathematics in high school and even won a state championship in Mexico: "*Fui a un concurso estatal y me llevé el primer lugar ... Me encantan las matemáticas y les ayudo a mis hijas con las matemáticas*" (I went to a state competition and took first place ... I love math, and I help my daughters with their mathematics homework).

These experiences allowed parents to support mathematics learning even when language barriers limited their involvement in other academic areas.

From parents' perspectives, Latinx families at Pacific Charter actively draw on diverse funds of knowledge to support their children's education. These include family collectivism, religious participation, bilingualism, community networks, and personal academic histories. Consistent with Moll et al. (1992), these parents' practices demonstrate that academic support is embedded in everyday life and shaped by cultural and social contexts. Recognizing and building upon these existing funds of knowledge presents an opportunity for schools to deepen partnerships with families and more effectively support students' academics, including mathematical learning.

5.2.6. Challenges in Supporting Children in Mathematics Education

Several parents described difficulties supporting their children's mathematics learning at home, particularly because instructional methods differed from their own educational experiences or when content exceeded their familiarity. Emma, for example, explained that her limited confidence with mathematics led her to seek external support: "I have had times in the past where he asked me for help, and I don't know how to do the homework, which is the reason why I reached out to the tutoring." Sonia similarly described challenges rooted not in a lack of effort, but in mismatches between the mathematical approaches she learned and those expected at school. She noted that while her solution strategies often produced correct answers, her child was concerned about being penalized for not using the teacher's preferred method: "They want you to show how you did it... I wanted to teach him how they taught us in Mexico, and he kept saying no." Sonia, another parent, also struggled to help her child with mathematics, but it was

because her daughter would tell her that she was doing it wrong or that the teacher would tell her she was doing it wrong:

Dice que así no es y le digo: “Va a ser la misma respuesta.” Y si es la misma respuesta. Pero él dice: “Pero me van a regañar los maestros porque así no, es que quieren que pongas como lo hiciste y todo eso.” Yo le quería enseñar como uno de niña le enseñaban allá en México. Ella decía que no, que no y que no. Se frustra uno porque ellos no te quieren hacer caso a lo que les dice uno de las matemáticas. Mejor le digo a mi muchacha grande que le ayude. (She says that's not how it's done, and I tell him, "You'll get the same answer." And it is the same answer. But she says, "But the teachers will scold me because that's not the right way; they want me to show how I did it and all that." I wanted to show him how, as a girl, I was taught back in Mexico. She kept saying no, no, no. You get frustrated because they don't want to listen to what you tell them about math. I just asked my older daughter to help her instead.

The student rejecting the parents' mathematical support, especially if the parent learns mathematics in a different country, is an interesting disconnect that is also explored by other researchers (Mistretta, 2004; Remillard & Jackson, 2006). Other researchers have also written about how sometimes there is a disconnect between the families and the schools due to the difference in how mathematics is taught in different countries or across time in the same country. This deserves a deeper analysis and is explored in the next chapter.

5.2.7 Parents' Perspective: Summary

This section highlighted parents' perspectives on how they engage with involvement opportunities at Pacific Charter, their hopes and aspirations for participation, and the ways they draw on their funds of knowledge to support their children academically. Findings indicate that parents are highly motivated to be involved in their children's education, primarily to support academic success, ensure safety, and build trust with teachers. They tend to engage most with accessible structures, such as monthly meetings, school events, and online platforms, while leadership opportunities remain less inclusive. However, their participation is often shaped and

limited by structural barriers. Although parents view involvement as a collaborative, relationship-based effort grounded in communication and shared responsibility, challenges such as language barriers, limited access to decision-making spaces, school location, work schedules, and inconsistent communication restrict their engagement, often pushing them toward less visible and non-academic roles.

Findings also show that parents aspire not only to support their children's academic progress but to access clearer communication, build stronger relationships with school personnel, and obtain more resources. In mathematics specifically, parents mentioned helping as much as they can; however, differences in instructional approaches and limited familiarity with current instructional practices can make it difficult to support their children effectively, or for their children to accept their help. These findings underscore the need for schools to better align with and build upon families' existing knowledge and capacities. Some parents suggested that mathematics workshops and at-home resources could better equip them to provide academic support at home.

Finally, parents actively draw on their funds of knowledge—including family collaboration, community networks, bilingual skills, and personal educational experiences—to support learning. Consistent with Moll et al. (1992) and Civil et al. (2005), parents see themselves as capable of supporting their children's academic development. However, they do not always receive adequate support from the school. Recognizing and positioning parents at Pacific Charter as valuable intellectual resources can strengthen family-school relationships and more effectively support student learning.

5.3 School Personnel's Perspective

This section explores the school personnel's perspective at Pacific Charter in describing their parental involvement views surrounding both general education and mathematics (RQ1). The first part examines, from the school personnel's perspective, how parents respond to existing structures intended to build and sustain parental involvement, both overall and within mathematics education (RQ1-A). Specifically, it analyzes how the school interprets parents' participation in the structures outlined in key school documents. The second part explores how, from the school personnel's perspective, parents draw on their funds of knowledge to support their children academically (RQ1-B). For this study, five individuals from Pacific Charter were interviewed: a volunteer coordinator, a front desk staff member who also serves as the attendance and transportation coordinator, two mathematics teachers (one of whom is a numeracy specialist), and the principal. The table below presents the participants' pseudonyms, roles at school, and tenure in those positions. Notably, none of the participants had more than 10 years of experience in their current roles. As a group, these interviewees are referenced as school personnel.

Table 5.4: School Personnel Interviewed at Pacific Charter

Name	Role	Years in Role	Years of Experience
Ms. Valeria	Volunteer Coordinator	1.5 years	2 years
Ms. Arianna	Attendance and Transportation Coordinator	Unclear	Unclear
Ms. Alissa	Math Teacher	2 years	2 years
Mr. Minh	Math Teacher / Numeracy Specialist	6 years	20 years
Dr. Smith	Principal	5 years	27 years

5.3.1 School Personnel’s Perspective: Parent Involvement Reasons & Challenges

This section examines, from the school personnel’s perspective, why parents become involved at Pacific Charter and the challenges associated with sustaining parent participation. Out of the five interviews, the volunteer coordinator and the two mathematics teachers attributed parent engagement to families’ proactive efforts to seek resources that support their children’s holistic well-being. Ms. Valeria, the volunteer coordinator, explained:

I would just say that the parents here are invested in their students, really hoping that they will go to college...Just showing the concern they have, not just academically, but also holistically...It’s inspiring to see that they come here to look for support for the students.

Both mathematics teachers also noted that parents at Pacific Charter are highly invested in their children’s success, which they connect to the school’s mission of preparing college-bound students. Ms. Alissa emphasized that these parents are very involved and supportive, stating that they “want their students ... to succeed” and are “on top of it.” Similarly, Mr. Minh observed that parental involvement tends to come from families of high-performing students, noting that PTA meetings are mostly attended by “parents who have higher-performing kids.” These findings suggest a culture of parental involvement that aligns with the school’s mission and supports student success. At the same time, teachers’ emphasis on uneven participation may

reflect emerging deficit-oriented assumptions about parent involvement, particularly when engagement is measured primarily through visible, on-campus activities. Less visible forms of involvement—such as support provided at home or through informal communication—may be overlooked if one focuses on in-person attendance.

Interviewees identified several factors that limit parents' on-campus participation at Pacific Charter, including geographic distance, the COVID-19 pandemic, and school policies. As noted by Dr. Smith in his interview, Pacific Charter serves families from 42 different zip codes, with families living an average of 15 miles from campus. Both Dr. Smith and Mr. Minh noted that long commutes and work schedules make attending events difficult, with Mr. Minh describing the school as often “out of their way.”

The interviewees noted that the COVID-19 pandemic further reduced parent participation. Dr. Smith, the school principal, observed that attendance at the monthly parent meetings declined since the pandemic: “It is a struggle and a barrier to get the involvement of all parents as much as we'd like...The numbers that they used to get are not the numbers we get now.” Ms. Arianna, the front desk personnel, echoed these concerns, noting that post-pandemic changes in work life, combined with the school's distance from families' homes, continue to limit participation. She also emphasized that the school is actively working to create more accessible opportunities for parents to attend meetings and events. Together, these accounts suggest that while Pacific Charter benefits from a strong desire for parental involvement, logistical challenges—both geographic and pandemic-related—continue to limit consistent, on-campus participation.

Mr. Minh, the mathematics teacher, highlighted changes in school policy after the

pandemic as an additional factor. He mentioned that five years ago, “parents were required (by Pacific Charter) to be involved in the community, whether it's through community service hours or donating things to help out the school,” but the requirement was removed because “it was unlawful.” Indeed, California Assembly Bill 1360 mandates that charter schools may encourage—but not require—parent involvement as a condition of continued enrollment. Such mandatory involvement policies may reflect deficit-oriented assumptions about families, implicitly suggesting that parents require external incentives to participate or that they have sufficient time, transportation, and flexibility to engage in school activities. These assumptions risk overlooking structural barriers and may frame parents who are less visible on campus as disengaged, rather than constrained by competing responsibilities or limited access.

Beyond policy change, Mr. Minh suggested that the Pacific Charter school could do more to support sustained parent involvement, though he does not view it as a current institutional priority:

I don't think that, at the moment, Pacific Charter does a good job in terms of sustaining parent involvement...It would be interesting if we had some time to discuss how to get more parents involved.... Like finding ways to provide relief for families so they can come to their children's events or to meetings.... Ideally, it would be better if parent involvement were a more common practice throughout sixth through 10th grade...But parent involvement is not a great priority for Pacific Charter.

Although the school employs a parent involvement coordinator—suggesting some institutional commitment to family engagement—Mr. Minh's comments indicate that this structure alone may be insufficient to meaningfully support students' academic needs, particularly in mathematics.

Overall, the findings illustrate a tension between strong parental involvement and persistent structural, policy, and institutional barriers that shape how parent involvement is

recognized and implemented at Pacific Charter. Mr. Minh’s interview clearly illustrates the tension among the school’s parental involvement plan, school personnel’s perspectives on parental involvement, and parents’ funds of knowledge—an example that will be explored further at the end of this chapter.

5.3.2 School Personnel’s Perspective: Parents’ Participation in the School’s Parent Involvement Structures

This section describes how, from the school personnel’s perspective, parents participated in the parent involvement structures at Pacific Charter, as outlined in the school’s key documents. Specifically, it focuses on how parents respond to the PTA’s monthly meetings, annual events, volunteer opportunities, and access to real-time student data and updates.

Monthly Meetings. From the perspective of school personnel, parents respond positively to PTA meetings. Out of the five interviews with school personnel, all mentioned the parent meetings, and three of them mentioned the PTA board meetings. They mentioned how many parents come to stay informed, access resources, and ask questions. Mr. Minh and Ms. Valeria both commented that the monthly parent meetings are scheduled alongside their students’ Saturday school, which serves as a “form of childcare/academic support.” They view this arrangement, then, as responsive to families’ transportation challenges and to their multiple responsibilities.

Additionally, Dr. Smith, Ms. Arianna, and Mr. Minh also mentioned that since Pacific Charter has a partnership with the local Food Bank, when parents come to the PTA meetings, they can take food from the food pantry if necessary. Such a partnership illustrates the school personnel’s responsiveness to families requiring additional assistance beyond academic support.

Overall, school personnel described that parents respond well to a structure that considers their transportation challenges, multiple responsibilities, and collaborates with local non-profits to offer additional family support. They view these monthly meetings as a key strategy to foster meaningful parent-school collaboration.

The PTA board meetings were referenced by everyone excepting the two mathematics teachers. Dr. Smith noted that he meets monthly with the board, along with the volunteer coordinator, to plan the monthly meeting and review requests, policies, and related matters, stating that the board “plans the [monthly] meeting and makes sure that everything’s in check.” Ms. Arianna added that non-board parents are welcome to attend to remain informed. Ms. Valeria, the volunteer coordinator, further observed an increased attendance after the PTA intentionally created space for parents to share concerns, emphasizing that “everyone is given the time and space to share their thoughts.”

Here is a discrepancy between school personnel and parents. Although school personnel perceive increased participation in this decision-making space, at least one parent, Sonia, shared that language barriers prevent physically present parents from engaging meaningfully. This suggests that current school efforts may not fully support linguistically diverse families. The PTA board meetings need to be more accessible. Sonia explained, for example, that she attended a PTA board meeting expecting interpretation services to be available, as they are in the monthly parent meetings, but they were not provided. One possible way to make PTA board meetings more inclusive is to offer interpretation services so that agenda items are linguistically accessible to all families.

Yearly Events. The school personnel mentioned a few yearly parent events. Three mentioned the back-to-school night and noted that parents use it to meet the faculty and familiarize themselves with the school's resources. Four of the five interviewees mentioned the spring learning presentations that happen at the end of the year. The spring learning presentation is a showcase of the students' work throughout the year, serving as an opportunity for families to see the work their children have done, assess their presentation skills, and interact with teachers. For example, Ms. Alissa and Mr. Minh mentioned that sometimes students choose a mathematics project they have worked on throughout the year, so, that night, parents can learn more about what happens in mathematics class. Ms. Alissa, a mathematics teacher, elaborated: "The parents walk around, and they'll ask students questions about the projects that they are showing them... It's just a fun way for parents to finally see the actual work their students are putting in."

The school personnel also highlighted other yearly events, such as the spring musical performance, sixth-grade orientation, and an event to show appreciation to the parents for their contributions. Ms. Arianna explained that the spring musical performances allowed parents to attend and watch students perform. Ms. Alissa, the mathematics teacher, described how parents use the sixth-grade orientation to learn more about Pacific Charter and noted that the school provides translation services in Spanish and Vietnamese to promote accessibility. Ms. Valeria explained that the event to show appreciation for the parents is for those who volunteered at least 10 hours throughout the school year; additional acknowledgements are given to those parents with a higher level of involvement. Collectively, these findings suggest that, from the perspective of the school personnel, annual events at Pacific Charter are celebratory in nature and position parents as informed observers of student learning, although participation is only recognized for highly involved families.

Volunteering Opportunities. School personnel described parent volunteer opportunities at Pacific Charter as primarily organized through the PTA. As Dr. Smith, the school principal, explained, “The cornerstone of our parent involvement is our PTA.” Ms. Valeria noted that parents can organize fundraisers or activities, but they must follow a formal process through the PTA and the volunteer coordinator, who “directs them to the appropriate person.” This structure positions both the volunteer coordinator and PTA board as the central gatekeepers for parent-led initiatives.

Additionally, Ms. Arianna described the requirements for volunteering at Pacific Charter, which include a Tuberculosis (TB) risk assessment and a Live Scan (fingerprinting and background check). While these measures are intended to ensure student safety, they may also create barriers for parents who want to volunteer. Beyond limited time or access to campus, some parents—especially immigrant parents—may feel hesitant about completing these requirements. Although the Live Scan only checks criminal records and does not reveal legal status, the process of fingerprinting may still feel intimidating, and navigating the logistics can also be challenging. Similarly, completing the TB test may require taking time off work to visit a clinic twice—once for the test and again for the results—which can be difficult for families with demanding schedules and limited work flexibility.

School personnel also described opportunities for parents to volunteer as members of school committees. However, Dr. Smith noted that Pacific Charter often struggles to recruit parents for these different committees. Ms. Valeria shared a similar observation, explaining that the most recent year was the first time the PTA board was fully staffed. These findings suggest that, although multiple avenues for parent leadership exist, structural and procedural barriers may limit consistent participation in formal parent decision-making roles.

This challenge appears to extend beyond the Pacific Charter. Within the SMUSD, out of approximately 120 elementary schools and 60 middle schools (public or charter), only 70 elementary schools and about six middle schools have a registered PTA under the San Miguel Unified Council of PTAs. This pattern suggests that middle schools, in particular, face greater difficulty both in recruiting parent volunteers for leadership positions in different committees and in maintaining an active PTA overall.

Real-Time Student Data and Updates. School personnel identified two main parent online platforms used at Pacific Charter to strengthen their communication with all families. These platforms are used to disseminate newsletters, volunteer opportunities (i.e., volunteering at a sports sale event with the PTA), as well as school and local resources (i.e., immigration resources). Ms. Valeria noted that these platforms often reach “the whole parent population,” which makes it a reliable communication channel for both parents and teachers. Additionally, she noted that a key feature of these platforms is the built-in translation capability, which enables parents to communicate with teachers in their preferred language, with messages automatically translated for both parties. She also mentioned that parents often come to school to get help with navigating these platforms, suggesting the need for multilingual technology and computer literacy to build parents’ confidence and access. Such a need, however, might be difficult to set up, especially for a parent who has other work and family commitments.

Aside from using the online platforms to communicate with parents, the school personnel mentioned the structure for seeking in-person communication. Dr. Smith, the school principal, mentioned that Pacific Charter uses the advisory model that serves as “the conduit between the parents and the school,” in which each student is assigned an advisory teacher who remains with them throughout middle school and high school, acting as the primary point of contact for

families. Half of the other school personnel interviews also mentioned the advisory model as the primary structure at Pacific Charter for parent-teacher communication. These findings, based on combining parents and school personnel's perspectives, suggest that while the Pacific Charter has established multiple communication pathways, inconsistent points of entry and limited interpretation capacity may hinder equitable access for linguistically diverse families.

5.3.3 School Personnel's Perspective: Parents' Participation in the School's Mathematics

Parent Involvement Structures

This section examines how, from the school personnel's perspectives, parents respond to the parent involvement structures for mathematics education at Pacific Charter. The 2024–2025 LCAP and the 2023 WASC accreditation report describe a new structure to support academically struggling students, including the creation of a numeracy specialist position beginning in the 2023–2024 school year. This approach uses universal screeners and multiple measures to identify students with significant gaps in numeracy, primarily in grades 6–8. The numeracy specialist oversees mathematics interventions, leads skill-building sessions, and communicates with parents and mathematics teachers. Dr. Smith also noted that this strategy addresses pandemic-related learning loss and aims to build mathematical fluency in middle school to support later success in Algebra II. As the numeracy specialist, Mr. Minh is the faculty member most directly involved in engaging parents in their children's mathematics learning.

From the school personnel's perspective, parent engagement efforts within this structure have yielded mixed results. Mr. Minh shared that two years ago, he worked with approximately 50 students in grades 6–8 who were identified as behind in mathematics and enrolled in an additional mathematics enrichment class, a point corroborated by Ms. Arianna and other school

personnel. To support these students, he coordinated with volunteers and substitutes to conduct scripted parent outreach calls informing families of declining grades and available mathematics supports. He later shifted his approach to emphasize early, positive relationship-building. Follow-up calls and supplemental support, including Zoom tutoring after school and on weekends, were offered to accommodate families' concerns about late campus hours and transportation.

Reflecting on these efforts, Mr. Minh noted that parent outreach was less impactful than expected, stating that student outcomes depended more on students' own engagement with school than on parental involvement alone: "If there are kids that are just resistant and don't want to be at school, no amount of parent-teacher involvement is going to change the outcome." This framing raises concerns about deficit-oriented interpretations of students' academic challenges, particularly given Mr. Minh's acknowledgment that he shares a community background with many students. His comments also suggest a sense of frustration and a narrow conceptualization of parent involvement, largely defined by responsiveness to phone calls, rather than as an ongoing, collaborative partnership. An asset-based perspective might instead view early relationship-building with families as a foundational step toward sustained collaboration focused on strengthening students' numeracy skills, even when immediate academic gains are not evident.

Beyond direct outreach, school personnel described indirect ways that parents are involved in their children's mathematics education. For example, both Dr. Smith and Ms. Arianna mentioned that parent involvement in mathematics is expressed through ensuring student attendance at after-school tutoring or Saturday school. As Dr. Smith mentioned, "those are really the cornerstones of how they get involved in the mathematical education of their

children.” Additionally, Ms. Valeria mentioned that academic counselors and literacy and numeracy specialists use monthly parent meetings to emphasize the importance of mathematics coursework and share strategies and resources with parents for supporting “student learning, in reading, writing, and math at home.” Ms. Alissa also mentioned that parents often engage with students’ mathematics content at the spring learning presentations.

Overall, school personnel characterized parent involvement in mathematics as limited and identified that involvement would be challenging to expand, with Ms. Valeria citing the wide range of parents’ educational backgrounds as a key barrier. As a result, school personnel seem to position parents as supporters of attendance and observers of student work rather than active partners in the learning of mathematics. Some school personnel suggested potential improvements. Ms. Alissa, for instance, suggested increasing parent–teacher conferences focused on academic progress, and the mathematics teacher and mathematics specialist, Mr. Minh suggested hosting family math nights to build confidence and appreciation for mathematics: “a night where parents and children played math games and just developed not only their mathematics confidence, but also an appreciation for mathematics and understanding the significance.” These suggestions were also paired with noting the school’s limited ability to implement such initiatives due to time, distance, lack of personnel to carry them out, and overloading current structures.

5.3.4 School Personnel’s Perspective: Parents Drawing on Funds of Knowledge for General and Mathematics Education

This section, addressing RQ1-B directly, examines how, from the school personnel’s perspectives, parents draw on funds of knowledge to support their children both in education

generally and in mathematics specifically. It also includes what community resources, according to the school personnel's perspective, parents draw on to support their children.

Parents at Pacific Charter draw on a range of funds of knowledge—including social networks, caregiving practices, and community-based resources—to support their children's academic and holistic development. Parents are viewed by school personnel as relying on one another for navigational support during school events, with Ms. Arianna noting that “some parents help each other out when it comes to school meetings.” Ms. Valeria further described parents as actively leveraging their social networks to seek resources and guidance for their children, highlighting their strong investment in students' long-term success. These behaviors reflect core elements of the funds of knowledge framework, which recognizes families' social and cultural practices as assets rather than deficits.

In the context of mathematics education, school personnel interpreted parents' efforts to create learning-supportive home environments as an extension of these funds of knowledge. Mr. Minh commented that long commutes, extended school days, and crowded living conditions often limit students' capacity to focus academically at home. In response, teachers work with families to identify ways to “create some sort of environment that can be somewhat conducive” to learning at home. From a funds of knowledge perspective, these adaptations represent families' practical knowledge and problem-solving strategies, though interviews with school personnel suggest that such assets are not always fully recognized or systematically integrated into instructional planning. These findings point to an inherent tension between school and parents, as the school personnel have limited insights to the families' funds of knowledge.

School personnel also commented on the difficulty of identifying and leveraging families' community-based funds of knowledge, particularly because Pacific Charter is, on average, 15 miles away from the families it serves, who are dispersed across the city. Reflecting on this gap, Dr. Smith noted that Pacific Charter has not yet fully engaged with families in their own communities, indicating an emerging institutional awareness of the need to move beyond school-centered involvement toward more community-embedded practices so that Pacific Charter "could have a presence in the communities." He also explained that the school conducts recruitment for new scholars; as Diego and Anna pointed out, these efforts strategically cast a wide net and are often integrated into community fairs throughout the city. Expanding this community presence could involve deeper collaboration with nearby institutions. One clear example is the school's partnership with organizations such as Access Youth Academy, where students receive academic tutoring and enrichment closer to their neighborhoods, with parents supporting attendance and coordination.

The rest of the school personnel identified community resources such as libraries and churches. Notably, Mr. Minh pointed out that parents may not always be aware of available tutoring services at local libraries. Overall, these findings suggest that while school personnel recognize parents' funds of knowledge in principle, they could benefit from more intentional opportunities to incorporate these assets into mathematics education and broader parent engagement strategies. Additionally, while most school personnel were unaware of community-based funds of knowledge, at least one school personnel member alluded to parents not being aware of their own resources in their community, a comment that could be interpreted as borderline deficit thinking.

5.3.6 Mr. Minh's Case

Mr. Minh's case demonstrates the example of the tension that often presents itself among the school's parental involvement plan, the school personnel's perspective — which could be borderline deficit-oriented —and the parents' funds of knowledge.

Mr. Minh described himself as both a teacher and a father. He was raised in the community near Magnolia Middle, attended Magnolia and the local high school, and has both a bachelor's degree in mathematics and a master's degree in education. He has been working in education for 20 years, has been at Pacific Charter for six years as a mathematics teacher and for two years as the numeracy specialist. Mr. Minh's perspective is unique to highlight because he comes from a similar background to the students he teaches at Pacific Charter, as some of the students at Pacific reside in the same neighborhood where he grew up. As a mathematics teacher and numeracy specialist at Pacific, where he has been for quite some time, he is also familiar with the structure of the school and is privy to students' academic records. It is his job to close the "achievement gap," which he defines as the academic achievement between "those who are affluent and those who are not affluent."

Mr. Minh stated that parental involvement does not affect efforts in closing the achievement gap, especially after the COVID-19 pandemic, which he noted has severely widened the achievement gap. He seemed to define parental involvement as attendance: coming to children's events or coming to meetings. He noted that he was open to discussion about how to get parents involved, but that "right now we're in a position of recovery still from all the changes we've had in the past five years," alluding to post-pandemic. These statements make it clear that Mr. Minh is exclusively focused on helping students to understand the mathematical

content (Martin, 2007). He does not draw on his own ability to relate to the students, and successfully separates the mathematical content from their families' realities. Drawing a barrier between parental involvement and mathematics as a teacher, for instance, he is not teaching in a way that is relevant and responsive to the students' social reality, which itself may affect the achievement gap.

Additionally, Mr. Minh differentiated between efforts for *sustaining* parental involvement and what is currently happening at Pacific Charter. He noted that currently, Pacific contacts a broad spectrum of parents through different means: through the electronic communication platform or Saturday meetings, but this communication only reaches out to parents of high-performing students. He also noted the yearly events with the biggest attendance, back-to-school night and the yearly spring exhibition, but it is significant that those events are one-time ordeals rather than recurring attempts at parent involvement. He mentioned that the closest thing to a sustained effort with volunteers at Pacific Charter was with the volunteers from the local university regarding reports on the severity of COVID and how to manage it at school, and the masks policy and such, but that it was not parental involvement at all. In his words, Pacific Charter does not do a good job at sustaining parental involvement.

He mentioned an idea of how parents can participate in a math night and learn more about how to help their children, but without adequate school-wide support, this translates into another focus on attendance: another another event that parents attend rather than engage. Without a vision or a purpose for building capacity, bringing parents together may not extend beyond periodic school events.

5.3.5 School Personnel's Perspective: Summary

The school personnel at Pacific Charter view parents as highly invested individuals in their students' academic and holistic development, which is aligned with the school's mission of preparing first-generation college students. They identified key challenges in getting parent participation in campus activities, including long commutes, post-pandemic shifts, work schedules, and volunteer requirements. While the school has structured forms of engagement (i.e., PTA meetings, annual events, and communication platforms), these position parents as supporters rather than active decision-makers. In mathematics education specifically, parent involvement is also limited to ensuring attendance at Saturday school or ensuring homework completion at home. Although school personnel acknowledge that parents have valuable funds of knowledge, such as social networks, these are not integrated into school practices.

Overall, there is a tension between the school's intention to promote meaningful involvement and the institutional and conceptual tension on how parental involvement is broadly understood and enacted at school.

5.4 Pacific Charter Case Conclusion

Perspectives from school personnel and parents regarding parental involvement at school are shaped by a clear tension between the parent involvement plans described in the school's key documents and the parents' realities and lived experiences. The PTA plays a key role in the parent involvement structure at Pacific Charter, which includes monthly general meetings, monthly PTA board meetings, and periodic fundraiser opportunities. Although many parents attend the monthly meetings, where general information is shared, there remains a limited number of parents at decision-making spaces, such as the PTA board meetings. Findings indicate

that parents are highly motivated to be involved in their children's academic and holistic development, and the school personnel also view them as such. Hence, parents operate and find creative ways to stay informed and involved in their children's education. Given that the school location is not close to their neighborhood, they have found ways to communicate with teachers through the school's online platform or navigate the language barriers by making use of school resources such as live translation or drawing on fellow parents.

Findings also suggest that parents actively draw on rich funds of knowledge — such as family collaboration, community network, bilingual skills, and personal educational experiences — to support learning, especially mathematics education. Consistent with Moll et al. (1992) and Civil et al. (2005), parents see themselves as capable of supporting their children's academic development. These efforts, however, are not always recognized by the school personnel and rarely integrated into instructional practices. School personnel tend to view parental involvement in mathematics more narrowly, often emphasizing attendance, homework support, or responsiveness to outreach, while overlooking less visible, home-based contributions.

Altogether, the findings highlight a discrepancy: while parents engage in diverse and resourceful ways, the school's structures and perceptions limit how parental involvement—especially in mathematics—is recognized, supported, and leveraged, pointing to the need for more inclusive, asset-based, and collaborative approaches. As Mr. Minh pointed out, Pacific Charter has figured out some aspects of helping parent presence on campus, but there remains much to learn regarding meaningful involvement, especially in decision-making regarding students' academics. Recognizing and positioning parents at Pacific Charter as valuable intellectual resources can strengthen family-school relationships and more effectively support student learning.

Chapter 6: Cross Case Analysis

Whereas Chapters 4 and 5 presented the cases of Magnolia Middle and Pacific Charter in detail, this chapter reorganizes the findings into a cross-case “meta-matrix” aligned by research question, drawing on the concepts of parents as intellectual resources (Civil et al., 2005) and funds of knowledge (Moll et al., 1992) to consolidate, synthesize, and systematize comparisons across Magnolia Middle and Pacific Charter. Findings are organized using the stacking comparable cases strategy (Miles et al., 2019). The chapter begins with a cross-case synthesis of how parental involvement structures are articulated in key school documents. It then presents two additional cross-case analyses: one examining how the school personnel describe parental involvement (RQ1), and a second examining how parents describe their own involvement (RQ2), both in education more generally and more specifically in mathematics education.

Although I could have analyzed the multiple dimensions of the cross-case analysis (Miles et al., 2019) in many ways, this chapter intentionally focuses on those aspects most directly aligned with the research questions: examining how school personnel conceptualize parental involvement, and how parents themselves understand and describe their roles in their children’s education. For a more focused and coherent synthesis of the data, only two or three focal findings in each section are examined in depth. Future research, therefore, could build on these additional findings. Based on the parents as intellectual resources framework described in Chapter 2, parental involvement in this study can be organized into four categories: parents, learners, teachers, and leaders (Civil et al., 2005; Civil & Bernier, 2006). Although this framework was originally developed to examine parental involvement in mathematics education, it has been adapted in this study to capture parental involvement both specific to mathematics and more broadly. Table 6.1 below shows the overall description of each category. The

remainder of this section examines how parent involvement structures at both school sites align with and reflect these four categories.

Table 6.1: Overall Description of Different Parent Categories Based on Civil et al. (2005)

Overall Description of Parents as:			
Parents	Learners	Teachers	Leaders
Parents helping their children with schoolwork or anything related to their education in general	Parents engaging in the learning of school or academic content themselves	Parents facilitating learning opportunities for other parents.	Parents advocating for a better education for the children in the district
Examples: talking to school personnel, finding tutors	Examples: organizing workshops	Examples: facilitating workshops at school	Examples: parents going to district meetings to speak on behalf of their interests

6.1 Schools' Parent Involvement in Documents

In both school sites, parental involvement is articulated primarily through state accountability documents, with goals and actions aligned to state mandates. As a result, parent involvement is framed in the key documents as a state-driven responsibility rather than as a central component of each school's mission or vision. Although parental involvement incorporates various elements and is addressed across multiple key documents at each site, this section focuses on two specific elements. First, it examines each school's primary parental involvement structure and the home-school compact, as these structures offer insight into the sustainability and organization of parent engagement efforts at each site. Then it highlights a cross-case analysis of the school personnel and parents' perspectives. The last section of this chapter offers a summary of findings and potential implications for practice at these two school sites.

6.1.1 Main Parent Involvement Structure

At Magnolia Middle School, the parent involvement structures outlined in key documents include a family engagement team, a family advisory group, the school site council, and several advisory committees consisting of parents and school personnel. However, findings from my field observations and interviews indicate that, in practice, responsibility for parent engagement is largely concentrated within the family engagement team, which is composed of three teachers and an administrative assistant. Furthermore, my observations and interviews also suggest that much of the responsibility for parent involvement at Magnolia within this engagement team is centralized in Paloma (pseudonym), the administrative assistant.

Paloma, who is widely recognized by both school personnel and parents as the primary point of contact for family engagement, coordinates parent volunteer opportunities, organizes parent events, and partners with nonprofit organizations to provide parents with on-campus resources. Paloma is a full-time administrative assistant; her primary responsibility is working as the principal's assistant. Her role as the primary point of contact for parental involvement at Magnolia appeared to be an add-on to her role as an administrative assistant. This means that most of the parental involvement efforts at Magnolia are dependent on Paloma, whose primary job is not parent involvement. This concentration of responsibility within one individual might reflect the school's limited infrastructure to sustain or strengthen parent involvement efforts.

Although the principal expressed intent to integrate family engagement goals into the broader culture of the school, the data does not provide clear evidence of how the family engagement team advanced this vision in practice. Rather than embedding parent involvement within shared decision-making structures, the concentration of responsibility in a single

individual restricts communication and transparency among school personnel regarding potential parent engagement opportunities. It also limits parents' roles to narrowly defined, non-academic tasks. For example, during the first half of the fall semester, the front desk personnel shared how Paloma distributed approximately 30 volunteer applications to interested parents, yet she was unable to clearly articulate the specific roles or activities available to volunteers beyond assisting with food at events.

Based on interviews with the school personnel and parents, and my ethnographic observations, parent committees at Magnolia were also limited. There was no Parent–Teacher Association (PTA) at Magnolia. There was an English Learner Advisory Committee (ELAC), but the administrator running the meeting acknowledged that although there were three parents on the ELAC committee and those parents were unable to make it to the meeting, the meeting would still run. Hence, decision-making spaces for parents to voice how to structure or refine parent involvement efforts at Magnolia seem limited.

At Pacific Charter School, on the other hand, the PTA is described by the principal as the “cornerstone of parent involvement.” The PTA oversees most parent engagement spaces, including board meetings, monthly meetings, and fundraising events. The PTA board consists of a small group of parents elected yearly by the Pacific Charter parent community to serve in leadership roles (e.g., president, vice president, treasurer), with substantial guidance and direction provided by the volunteer coordinator and the principal. The volunteer coordinator, Ms. Valeria, who works full-time, is the “liaison for [the PTA] for Pacific,” relaying parents' concerns and suggestions to school personnel. Before each general PTA meeting, the PTA board meets with the volunteer coordinator and the principal, both of whom help “plan the [general] meeting and make sure that everything's in check.” Monthly PTA meetings take place on

Saturday and are facilitated by the volunteer coordinator, during which the principal shares school-wide information and the PTA highlights opportunities for parental participation. From interviews with the school personnel and parents, and my ethnographic observations, parent committees at Pacific Charter were limited to the PTA. Hence, decision-making spaces for parents to voice how to structure or refine parent involvement efforts at Pacific Charter were restricted to the PTA, which mostly organized non-academic activities.

The principal at Pacific acknowledged that a significant structural challenge to increased parent involvement is the physical location of the school campus. He expressed a desire to think of creative ways to meet with parents close to their neighborhood, and identified two facilities that Pacific Charter has access to through their connection to Darwin University (pseudonym), that are located closer to most of the families they are serving. However, he noted that they have not been able to navigate how to have a stronger presence closer to families.

The key similarities and differences among the main parent involvement structures at both schools are outlined in the Venn diagram in Figure 6.1 below. Although both schools described a commitment to monthly parent meetings in their official documents and interviews, this commitment is implemented differently at each site. At Pacific Charter, the meetings are highly structured. Dates for the entire year are set in advance, allowing all stakeholders to plan accordingly. The principal collaborates with the PTA board to develop the agenda, the school staff delivers relevant presentations, and local nonprofit organizations are invited to share resources with families. To ensure accessibility, live interpretation in Vietnamese and Spanish is provided. According to the principal, attendance averages around 200 parents in a school with 800 students. However, in my ethnographic visits, attendance averaged around 100. Because meetings are held on Saturdays—when most parents are not working—and students are already

on campus for Saturday school, there is convenience: parents attend the PTA meeting while their children attend school. In contrast, monthly meetings at Magnolia are less structured. Although the parent engagement team discusses potential events at the beginning of the school year, specific activities and dates are typically finalized and broadly communicated to parents only a few weeks in advance. Events are scheduled at varying times, sometimes during school hours and sometimes after school. Interpretation services are inconsistently available. Attendance averages about 15 parents out of 800 students. While this flexible approach allows for a wider range of activities, it limits participation to parents whose work and family schedules permit attendance.

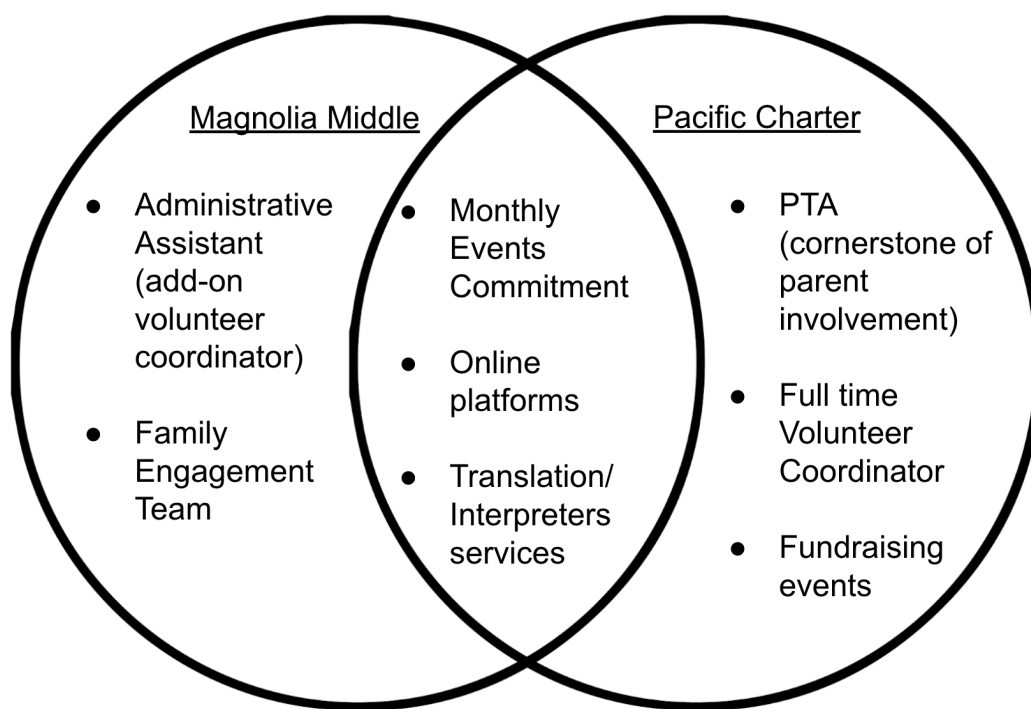


Figure 6.1: Main Parent Involvement Structure Across Sites

The limited decision-making spaces in both school sites limit the parents' voices on how to strengthen or reshape their involvement in general education and in mathematics education. At Magnolia Middle, one individual shouldering the responsibility of figuring out how parents can

best contribute to their students' educational goals limits how parents can contribute as well. Additionally, not drawing on the family engagement team, both at the school level and at the district level, seems like a missed growth opportunity. At Pacific Charter, on the other hand, with a small number of parents involved in leadership roles, and the volunteer coordinator filtering their contributions, it appears that decision-making authority remains largely centralized within school personnel rather than shared with parents themselves. Additionally, the PTA board meetings could be more accessible, both physically and linguistically, as parents find it difficult to travel to the school or are unable to understand the meeting due to the lack of interpreter services.

Across both cases, the parent involvement structures described in key documents—and their enactment in practice—constrain the roles available to parents within the school. In both school sites, parents were primarily positioned as participants in school-organized spaces (i.e., monthly PTA meetings), members of pre-defined committees (i.e., ELAC, PTA board), or volunteers assigned to predetermined, non-academic tasks (i.e., bringing food, setting up reading club). These written structures, with their practical manifestations, offer few opportunities for parents to engage as intellectual contributors to academic decision-making, including in mathematics education.

6.1.2 Home-School Compact

Both school sites use a home–school compact to delineate the responsibilities of each stakeholder in supporting student success. In both school sites, the responsibilities assigned to the school include holding annual parent–teacher conferences, providing access to grade reports, ensuring opportunities to communicate with school personnel, offering classroom volunteer opportunities, and maintaining regular, accessible two-way communication with families. The

responsibilities assigned to parents at Pacific Charter, as outlined in the home–school compact, are again listed (for easier reference) in Table 6.2 below. For analytic purposes, these responsibilities were grouped into the following categories: ensuring students’ daily attendance, monitoring students at home, maintaining communication with teachers and counselors, staying informed, and participating in relevant decisions.

Table 6.2: Home-School Compact from Pacific Charter

Categories	Parent/guardian responsibilities
Ensure students’ daily attendance and active participation	- Ensure the student goes to school daily, on time, and prepared to learn - Plan family vacations around the school calendar - Know and support school/classroom rules and attendance plans - Hold high expectations and regularly monitor students’ progress at home
Monitor students at home	- Provide regular (quiet) time, place, and supervision for homework completion at home - Read to the child and ensure the child reads daily for pleasure - Limit students’ screen time and encourage students to use their out-of-school time positively
Participate in relevant decisions	- Participate in decisions related to the education of the child
Maintain communication with teachers/counselors	- Attend the parent-teacher conference as requested - Be available and return teacher calls promptly - Contact teachers/counselors about concerns/problems promptly
Stay informed	- Understand students/parents' rights and responsibilities - Earn a minimum of 15 participation points per school year (one participation point = one hour)

The parent responsibilities outlined in Magnolia Middle’s home–school compacts closely mirror those at Pacific Charter. Parents are primarily expected to engage by attending parent–teacher conferences, communicating with teachers through online platforms, monitoring students’ academic progress, and connecting their children with tutoring when needed. Notably, in both school sites, the home–school compact frames parental involvement almost exclusively within the category of *parents as parents* (Civil et al., 2005). There is no explicit reference to

parents engaging as learners, facilitating learning opportunities for other parents, or contributing to instructional or academic decision-making processes.

Although the home-school compact in both school sites includes language about parents' "participating in relevant decisions," this expectation is articulated broadly and without clear mechanisms for meaningful participation in the school's decision-making committees. This finding is taken up more fully in the parents' perspective section below, describing how parents from both schools attempted to engage in decision-making related to their children's education, alongside feelings of not being heard or adequately supported. The remainder of this section explores the portion of the home-school compact regarding parent-school communication in both school sites.

Maintain Communication with Teachers and Counselors. Both schools have established structures intended to facilitate communication between parents and teachers or counselors regarding students' academic and holistic development. At Pacific Charter, an advisory program was created to support students longitudinally and to address opportunity gaps for underrepresented students pursuing college pathways. Through this model, advisory teachers remain with the same cohort of 30 students from sixth through twelfth grade, theoretically enabling stronger relationships with students and families over time. Advisory teachers are expected to serve as a primary point of contact for parents and to connect families with appropriate school personnel when concerns arise.

While this structure was clearly understood by school personnel, parents reported mixed levels of awareness and reported usefulness. For example, Sonia explained that although she knew she was supposed to contact the advisory teacher, she lacked a personal connection with

him and anticipated language barriers. As a result, she sought assistance from the front desk personnel, who were unable to help her, and ultimately turned to the librarian, whom she knew spoke Spanish. This example highlights how formal communication structures may not function as intended when linguistic access and relational trust are not adequately addressed. The advisory program at Pacific Charter represents a potentially promising structure for strengthening parent–teacher communication at the middle school level by reducing the number of contacts parents must navigate and fostering sustained relationships over time. Given that most public middle schools in the county do not implement such advisory models, this finding informs a practice recommendation further discussed in Chapter 7.

At Magnolia Middle, parents are expected to communicate directly with individual subject-area teachers to learn how to support their children academically. Consequently, teachers are responsible for communicating with approximately 150 families. Administrators encourage teachers to prioritize outreach to parents of students who are experiencing significant academic or behavioral challenges, particularly during parent–teacher conferences. The mathematics teachers mentioned having difficulty engaging in meaningful communication with families beyond occasional email updates. Mr. Marshall noted that only two parents attended parent–teacher conferences that year—one at the school’s request due to serious behavioral concerns and another through an informal interaction in the parking lot. Since a third scheduled parent was unable to attend, Mr. Marshall left for home early. In total, Mr. Marshall met with two parents of these 150 families.

Although both school sites have systems in place to maintain parent–teacher communication, the frequency and depth of these interactions remain limited. Figure 6.2, below, highlights key similarities and differences in how the parent-school communication is structured

between the two sites. At Pacific Charter, Ms. Alisa, a mathematics teacher, noted that administrators emphasize parent–teacher conferences for students who are struggling academically. At Magnolia Middle, both mathematics teachers commented on the low parent attendance at conferences. Across both schools, teachers and parents described most interactions between parents and mathematics teachers as brief. Additionally, the mathematics teachers at both sites expressed a desire for more consistent and meaningful engagement with families, not only those whose children are experiencing academic difficulties. This can be an attainable growth opportunity for both school sites to strengthen the depth of interaction between parents and teachers regarding the students’ well-being.

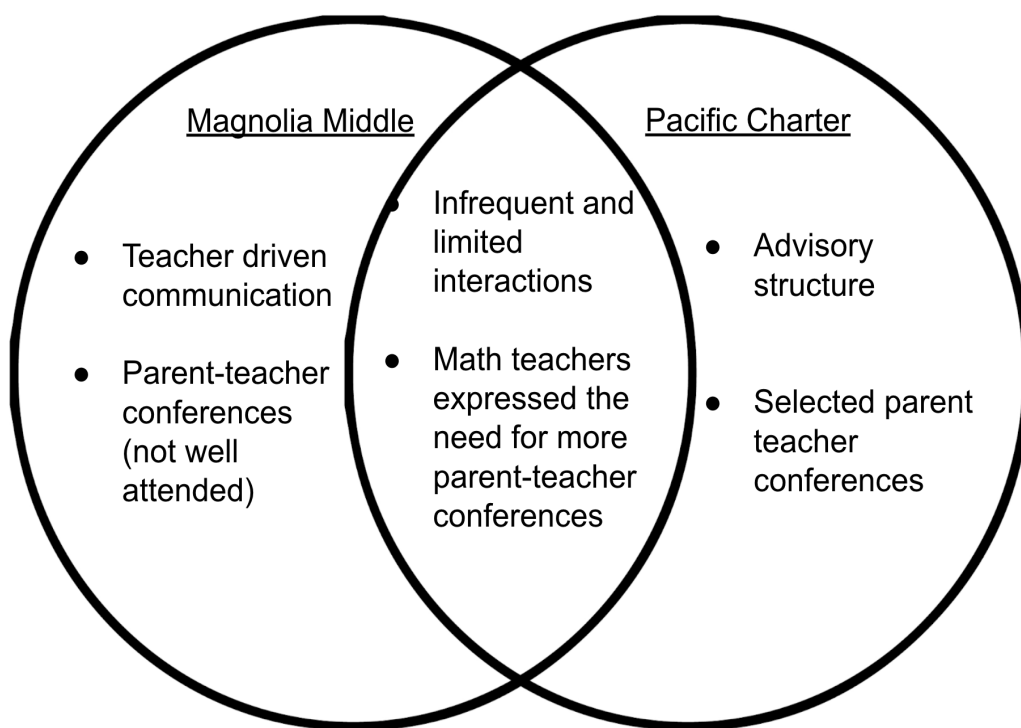


Figure 6.2: Parent Communication with School Personnel Across Sites

6.1.3 Summary

Across both school sites, close analysis of the parent involvement structures outlined in key school documents—supported by interview data and field observations—indicates that parental involvement is overwhelmingly framed within the category of parents as parents (Civil et al., 2005). There is little to no explicit recognition or opportunities for parents as learners, facilitators of learning for other parents, or contributors to instructional or academic decision-making processes. Additionally, parent communication with school personnel across both sites seems infrequent and limited. Lastly, these findings suggest a growth opportunity for schools to collaborate with local institutions or organizations to provide more meaningful opportunities for parent involvement. Such collaboration can help reshape the written parent involvement structure in the key school documents and their translation into practice. That is, reviewing school policy

in urban education through the lens of both funds of knowledge and community cultural wealth can better inform written parent involvement documents (Colina-Neri et al., 2023; Rios-Aguilar & Neri, 2023).

Closer analysis is warranted to better understand both the intent behind the key school documents and their practical implementation in schools. When state documents refer to parents as “educational partners,” clearer and more concrete guidance and resources may be necessary to support schools in translating this language into meaningful, inclusive practices. Without such clarity and support, schools such as Magnolia Middle and Pacific Charter may continue to enact broad forms of parental involvement that limit meaningful and empowering parental involvement. Further research is needed to examine how parental involvement is conceptualized and enacted beyond these two sites, as these findings raise broader questions about whether this framing of parental involvement reflects a wider pattern across schools at the county or state level.

6.2 School Personnel’s Perspective of Parental Involvement

Across both Magnolia Middle and Pacific Charter, the school personnel described parents as deeply invested in their children’s well-being, academic success, and long-term futures. School personnel at both sites emphasized that parents’ motivations are strongly tied to aspirations such as college readiness, particularly at Pacific Charter. Importantly, school personnel at both schools explicitly rejected deficit interpretations that equate low on-campus presence with lack of care or disengagement. Instead, they generally acknowledged that parents’ limited physical presence at school is often shaped by structural constraints, including work schedules, transportation challenges, language barriers, and, at Pacific Charter, lingering post-

pandemic disruptions. This shared recognition across sites suggests a generally positive shift from overt deficit narratives toward a more contextualized understanding of parental involvement.

At the same time, cross-case analysis revealed moments in which deficit-oriented interpretations surfaced alongside asset-based discourse. At Pacific Charter, Mr. Minh suggested that parents lacked knowledge of available academic community resources, while at Magnolia Middle, Mr. Marshall attributed low parent participation to a lack of interest. These comments, though not dominant, reveal tension in how school personnel conceptualize parental involvement. While both school documents and the respective school personnel articulated an understanding of families' funds of knowledge at a conceptual level, there were limited structures to meaningfully engage parents as intellectual resources and use those funds of knowledge meaningfully (Moll et al., 1992). As a result, parents' knowledge and experiences remained largely peripheral to academic decision-making and instructional practices.

From the perspective of school personnel, Latinx parents across both sites draw on a range of funds of knowledge to support their children's education. Teachers and administrators identified parents' use of: social networks, such as organizing community events and supporting one another informally; community-based resources, including libraries and churches; and cultural and linguistic assets, such as multilingual communication and shared cultural practices. At Magnolia Middle, school personnel acted on this understanding by inviting parents to lead school-based activities, such as a parent-facilitated reading club, and by supporting parent-initiated events like potluck gatherings. At Pacific Charter, school personnel acknowledged these same resources but mostly created communal spaces for parents to voice concerns, and by offering leadership opportunities to only a small number of parents through the PTA board.

Despite these efforts, across both cases, opportunities for parental involvement were rarely connected to students' academic learning, including mathematics. Thus, while parents' funds of knowledge were recognized in principle, they were seldom leveraged pedagogically. Below, I focus on how school personnel viewed parental involvement in mathematics education specifically.

6.2.1 Views of Parental Involvement in Mathematics Education

From a cross-case perspective, findings suggest that parents' mathematical funds of knowledge are largely unrecognized within existing school structures. School personnel at both sites cited parents' mathematics background—or perceived lack of confidence in mathematics—as a barrier to deeper involvement. This interpretation reflects a school-centric view of mathematical knowledge, grounded in formal instructional methods. It overlooks everyday mathematical practices embedded in families' lived experiences and some had formal expertise. The school personnel at both schools also referenced limited prior experience with parent involvement in academics more broadly, and in mathematics specifically, further reinforcing the missed opportunity to perceive how parents can engage with mathematical content.

At Pacific Charter, school personnel described the numeracy specialist model as the primary mechanism for supporting students in mathematics and communicating with families. From the school's perspective, this model was effective in providing targeted, one-on-one support to students who needed it and in informing parents of their children's progress. However, parents were positioned primarily as recipients of information rather than as collaborators in the learning process. With the numeracy specialist model, parents' roles were limited to monitoring

homework and enforcing attendance, rather than contributing mathematical insights or knowledge.

At Magnolia Middle, efforts to engage parents were individual teacher-driven, some of whom commented that parents desire clearer guidance regarding curricular expectations and instructional approaches. One teacher, Mr. Lane, noted that curricula that included parent-friendly materials made it easier to share mathematical concepts with families. Importantly, he also recognized that parents' difficulties supporting mathematics at home stemmed from differences between their own schooling experiences and current instructional approaches, rather than from a lack of intelligence or effort—an interpretation consistent with Civil's work on bridging home-school mathematical knowledge (Civil et al., 2005). Both mathematics teachers, Mr. Lane and Mr. Marshall, identified parent mathematics workshops as a potentially supportive space for engagement. However, no sustained, schoolwide structures existed to support such engagement. Teachers cited staffing shortages, workload demands, and limited institutional support as barriers to implementing math-focused parent engagement initiatives.

Across both cases, administrators framed community-building as a necessary precursor to academic or mathematics-focused parental involvement. At Magnolia Middle, this is particularly challenging, as it leaves mathematics engagement largely dependent on individual teacher initiative, which is difficult in the face of staffing shortages. At Pacific Charter, similar constraints were evident, with school personnel acknowledging that “parental involvement [in mathematics] isn't the top priority” and the school does not currently have the “bandwidth” for mathematics workshops, as Mr. Minh mentioned. Although family math nights and workshops were mentioned at both sites as potential strategies, these ideas were framed as aspirational rather than actionable, indicating that parent engagement in mathematics remains an add-on to

parent involvement efforts. A visual cross-case analysis of the main findings in parental involvement in mathematics education at both sites is shared in Figure 6.3 below.

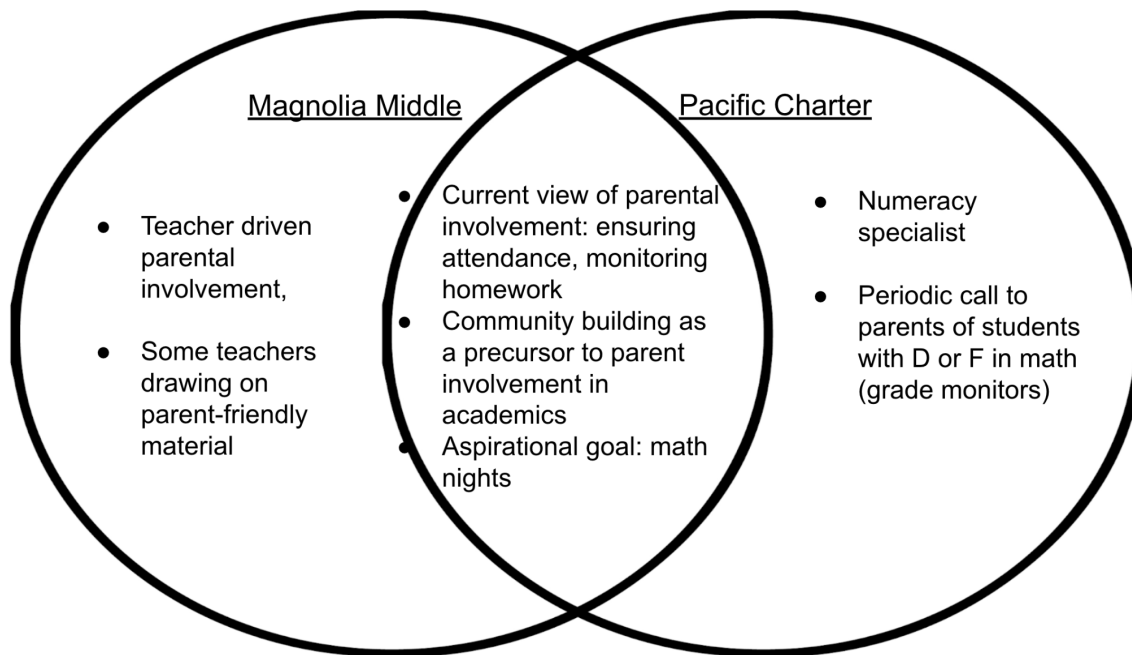


Figure 6.3: Parent Involvement in Mathematics Education at Both School Sites

School personnel at both Magnolia Middle and Pacific Charter described parental involvement in mathematics education in narrow and limited ways. Across both sites, involvement was primarily defined as ensuring students' attendance at school or tutoring, monitoring homework completion, responding to periodic teacher communications, or attending events where student work was displayed, such as Pacific Charter's annual events. From the school personnel's perspective, these parental involvement practices represented the extent of parental engagement in mathematics. This framing reflects a missed opportunity for parent involvement that positions them as contributors to mathematical learning. Generally, however, parental involvement in *mathematics* remained peripheral, unsupported, with limited evidence of the school personnel in either school site viewing parents as intellectual resources. With a more

asset-based mentality shift, parental engagement in mathematics could itself strengthen community-building at school, a point elaborated in Chapter 7.

6.2.2 Summary

The school personnel across Magnolia Middle and Pacific Charter described parental involvement as essential yet significantly constrained by structural and institutional factors. From the school personnel's perspective, Latinx parents actively draw on social, cultural, linguistic, and community-based funds of knowledge to support their children's education in general. However, while these assets are acknowledged in theory, they are rarely integrated into school instructional or academic practices. In mathematics education specifically, parental involvement is narrowly defined and largely limited to compliance-oriented roles, such as attendance monitoring and homework supervision. Viewed through the lenses of Civil et al.'s (2005) parents as intellectual resources framework and Moll et al.'s (1992) funds of knowledge, both schools demonstrate a disconnect between their stated recognition, in theory, of parents' knowledge and the limited structures available to enact this recognition in practice. As a result, parental involvement—particularly in mathematics—remains an underutilized resource, shaped more by institutional constraints than by meaningful partnerships with families.

6.3 Parents' Perspective on Parent Involvement

Across Magnolia Middle School and Pacific Charter School, Latinx parents described their role as central to their children's educational experiences. They consistently positioned themselves as primary educators, advocates, and moral guides for their children. Parents emphasized their responsibility to support their children's academic progress, well-being, and character development, while engaging with school personnel with care, accountability, and

intentionality. Viewed through Civil et al.'s (2005) parents as intellectual resources framework and Moll et al.'s (1992) funds of knowledge, parents at both sites demonstrated a strong and profound understanding of their role in education, even as they navigated school structures that only partially recognized or valued their contributions or assets.

Across both school cases, parents described parental involvement as multifaceted and intentional. They articulated their own roles: as modeling the importance of education for their children; following their children's academic progress and holistic well-being, often from a distance; building relationships of trust with teachers and school personnel; and advocating for their children, particularly when they perceived inequities affecting their child or the broader student community. These self-descriptions align closely with Civil et al.'s (2005) conceptualization of parents as intellectual resources: parents drawing on their experiential knowledge of their children and exercising moral and ethical judgment in decision-making related to schooling.

Parents at both Magnolia and Pacific Charter explicitly challenged the notion that parental involvement requires physical presence on campus. They described their social realities—such as working multiple inflexible jobs, caring for multiple children, navigating transportation and childcare constraints, language barriers, and chronic illness—as shaping how and where they engage. Within these constraints, parents demonstrated intentional and strategic engagement. For example, some parents, like Susana at Pacific Charter, monitored grades and communicated with teachers digitally during work hours, while others, like Kyle at Magnolia Middle, prioritized attendance at events for his younger children when choices had to be made. School personnel, such as Mr. Lane at Magnolia, echoed this understanding by acknowledging that care and commitment do not necessarily translate into visibility at school events. These

patterns suggest that the parents' involvement practices at both school sites are adaptive and responsive to structural conditions rather than indicative of disengagement.

The forms of engagement available to parents differed across sites. At Magnolia Middle, parents described opportunities to participate in culturally affirming spaces, such as cultural potlucks and line dancing, which allowed them to draw on their cultural and social knowledge. At Pacific Charter, parents relied more heavily on the structured monthly parent meetings as well as on online platforms, particularly given the school's geographic inaccessibility and transportation constraints. Across both sites, parents selectively engaged in spaces they perceived as welcoming and accessible, demonstrating what Moll et al. (1992) describe as institutional knowledge—an understanding of how to navigate systems strategically to maximize benefit within their available time and resources. These findings are outlined in Figure 6.4 below, highlighting how parents across the view their involvement as occurring both inside and outside the school.

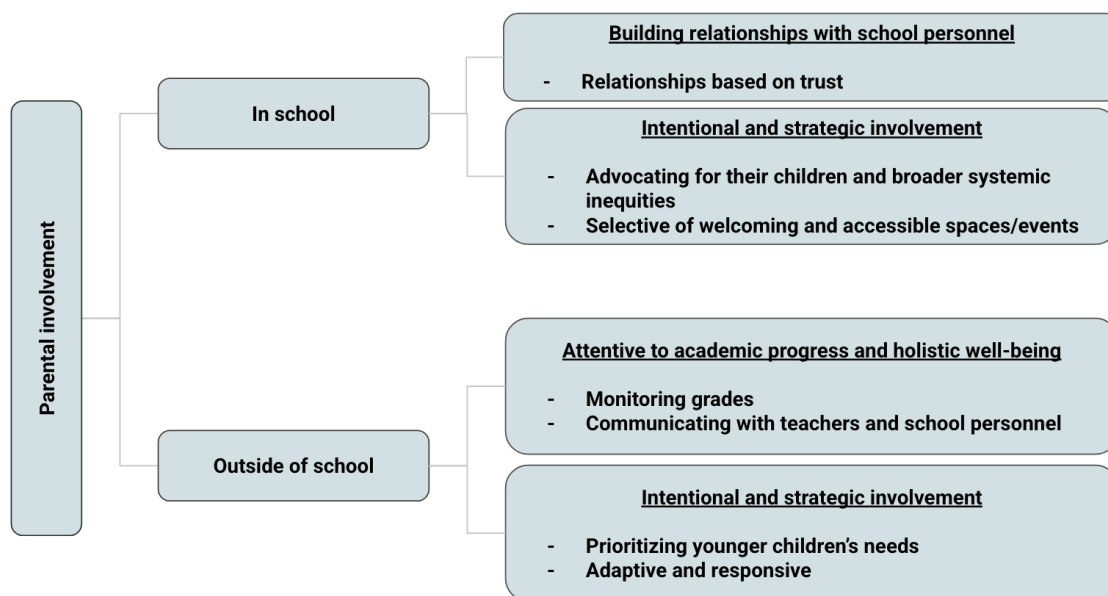


Figure 6.4: Parents' Perspective on General Parent Involvement

Parents at both schools described disengaging from formal decision-making spaces that were conducted exclusively in English, lacked interpretation, or were scheduled during work hours. For example, Fabiola at Pacific Charter, mentioned: “*Cuando son completamente en inglés ... no voy porque sé que no voy a entender todo*” (When they are in English... I won't go because I won't understand everything). At Magnolia Middle, Alfredo mentioned he is unable to attend school events for families mainly due to his work schedule, but he is often present on his days off. Parents characterized these spaces as intimidating, exclusionary, or dismissive, which discouraged participation. Importantly, this disengagement did not reflect disinterest; rather, it represented, again, a strategic participation informed by parents' prior experiences, knowledge of institutional norms, and their social status. From a funds of knowledge perspective, parents' selective participation reflects agency and discernment in navigating social and school structures that do not consistently value their linguistic and cultural resources (Moll et al., 1992).

6.3.1 Parents' Perspective of Their Role in Mathematics Education

Consistent with prior research, both school sites demonstrated instances of parental involvement in general (i.e., potluck dinners) rather than in mathematics-specific contexts. However, across both Magnolia Middle and Pacific Charter, parents described mathematics as a critical life skill essential for problem-solving and future opportunities. Although parents expressed a strong desire to support their children's mathematical learning, many reported feeling underprepared to do so.

Parents across both sites described tensions related to mathematics instruction, especially when their own educational experiences differed from their children's current learning experiences and teachers' expectations. These tensions were particularly salient among immigrant parents, who noted differences between the mathematics learned in their home country and the instructional approaches currently emphasized in their children's schools. Many parents described learning mathematics in ways that prioritized procedural knowledge, whereas their children's classrooms emphasized explanation, discourse, and language-intensive reasoning (Mistretta, 2004; Remillard & Jackson, 2006). Within this context, parents articulated four primary ways of engaging with mathematics education: as advocates, as direct mathematical resources, as learners or co-learners, and as sources of motivational support.

Some parents positioned themselves as advocates for their children's mathematics education, actively seeking institutional support when concerns arose. For example, at Pacific Charter, Aurora attempted to raise concerns about the staff shortage and its impact on the education of her child directly with school personnel and during the monthly parent meetings but felt that her perspective was not fully acknowledged. Similarly, at Magnolia Middle, another

parent, Paola, raised concerns about staffing at the district level after being encouraged by the mathematics teachers; however, she did not receive a response from district personnel. These parents' actions align with Civil et al. 's (2005) framing of parents as leaders who advocate for improved educational opportunities for all children in their communities. However, across both cases, parents' advocacy efforts were met with limited feedback or success. When parents did not receive acknowledgement or follow-up, they interpreted these responses as dismissive, which may weaken trust and discourage future engagement in advocacy.

Other parents described themselves as direct mathematical resources for their children, drawing on their own strong mathematics backgrounds to support their children in doing homework and explaining concepts. For instance, Paola at Magnolia described supporting her child directly or drawing on her brother for assistance. Similarly, Yuliana at Pacific Charter referenced her own strong mathematical background—including winning a regional mathematics competition in Mexico—as a resource she used to regularly help her daughters with homework. These examples align with Civil et al. 's (2005) framing of parents as learners and contributors outside formal school settings, as parents actively mobilized their own knowledge to support their children's academic learning. For these parents, involvement in mathematics occurred primarily at home and did not require school-based support. Notably, this involvement is largely—or entirely—invisible to school personnel.

A third group of parents, particularly immigrant parents, described themselves as learners or co-learners of mathematics (Civil et al., 2005), actively working to adapt and expand their mathematical understanding to support their children. Although these parents expressed a strong desire to help their children learn, many struggled with unfamiliar instructional approaches, such as the emphasis on mathematical discourse, explanation, and language-intensive problem

solving. Parents at both sites shared examples of these challenges. Alfredo, a parent at Magnolia, explained that he struggled to help his children with mathematics and therefore sought additional support. Sonia, a parent from Pacific, described attempting to help her daughter but being told repeatedly, “*me van a regañar los maestros porque así no es*” (the teachers are going to scold me because that’s not how it’s done). Rather than disengaging when they felt unprepared or when their approaches did not align with teachers’ expectations, these parents persisted and sought alternative ways to remain involved. Some asked their children to explain concepts to them, while others gave suggestions for additional engagement. For example, Emma from Pacific Charter proposed math nights to help parents learn alongside their children, and Maria encouraged other parents to view after-school tutoring not as a replacement for parental involvement but as “an opportunity for you to try to learn and be a little more engaged with your kid in math.” Viewed through Moll et al. 's (1992) funds of knowledge framework, these parents were actively seeking to expand their own funds of knowledge in response to new academic demands.

Other researchers have similarly examined immigrant parents’ involvement in mathematics education (Civil, 2018; Cuevas, 2021; Jasis & Ordoñez-Jasis, 2012). Latinx immigrant parents often navigate multiple barriers as they attempt to support their children’s schooling. For example, some may primarily speak Spanish and therefore feel more welcomed when school personnel communicates with them in their home language. Differences between U.S. school structures and those of their countries of origin can also create challenges, particularly when instructional practices differ significantly. In addition, social and economic realities—such as demanding work schedules, multiple jobs, or family responsibilities—may limit parents’ physical presence at school. Given these factors, family–school partnership models

that intentionally consider differences in culture, language, and mathematics content may offer promising pathways for engagement (Lopez & Donovan, 2009). Family–school partnerships that prioritize listening to parents and asking what they need to better support their children could help position Latinx parents as intellectual resources within mathematics education.

Finally, some parents described their role in mathematics education primarily as providing emotional and motivational support. These parents recognized the stigma and anxiety often associated with mathematics, particularly during middle school, when students experience significant social, emotional, and developmental changes. Parents also reflected on their own feelings of embarrassment or fear related to mathematics. Kyle at Magnolia noted that some immigrant parents may feel embarrassed about “not knowing” mathematics or not knowing how to help their children. Similarly, Sonia at Pacific Charter mentioned that age and cultural differences sometimes make it difficult to understand current instructional practices. Despite these challenges, parents across both sites expressed interest in attending school-based meetings or workshops focused on mathematics that could reduce feelings of intimidation and normalize learning mathematics as a collective and ongoing process. In doing so, these parents draw on emotional, cultural, and relational resources to encourage persistence and confidence in their children’s mathematical learning (Moll et al., 1992).

These four categories of how parents described themselves as engaging in mathematics education are highlighted in Figure 6.5. Although most parents described themselves as acting under one of these categories, the current parent involvement structures at both sites restrict their role or contributions. For example, parents who acted as advocates for a better education of their children and of the children at the school encountered obstacles as they navigated the educational system trying to address inequity.

Although parents view themselves as direct mathematical resources for their children, limited school personnel acknowledged or were aware that parents had these funds of knowledge. Similarly, parents wanting to learn mathematics or trying to motivate their children expressed limited support at school with the current structures. These findings highlight various growth opportunities, including reconceptualizing these Latinx families as rich in funds of knowledge to draw on (Gonzalez et al., 1993), hosting math nights, offering workshops to strengthen advocacy skills, and collaborating with local organizations or non-profits aimed at empowering parents in the education of their children. One such collaboration could be with an organization like the Parent Institute for Quality Education (PIQE), which trains parents to become advocates for the students at their children's school (Auerbach, 2012).

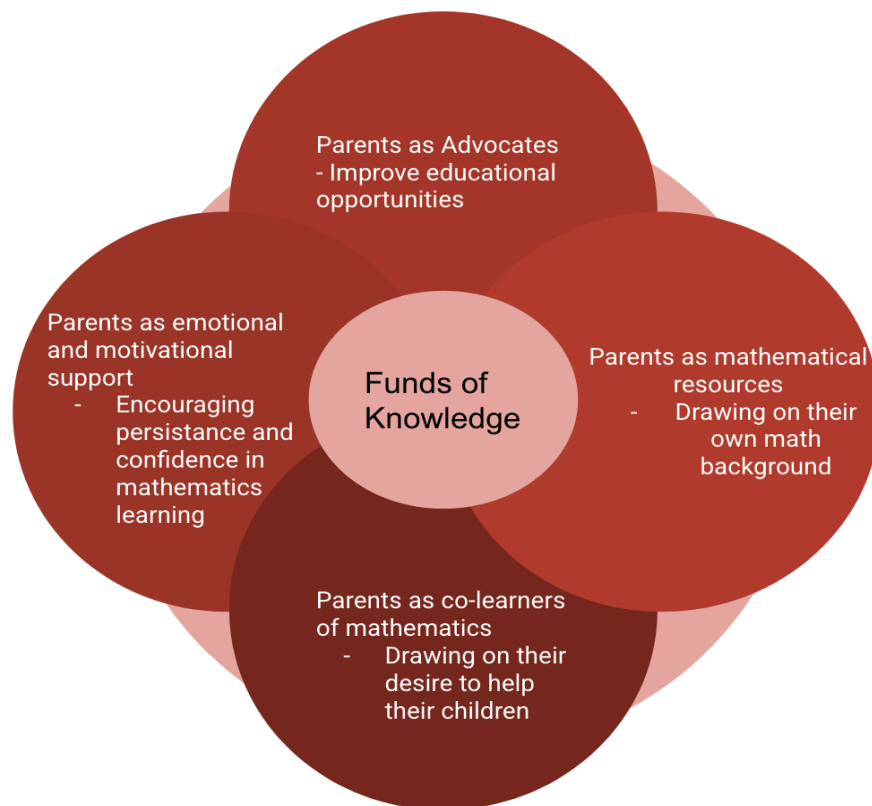


Figure 6.5: Parents' Perspective on Parent Involvement in Mathematics Education

Given the demographic composition of both schools—Pacific Charter’s focus on low-income first-generation college-bound students and Magnolia Middle’s highly diverse local community—structured, linguistically inclusive mathematics workshops could serve as a meaningful entry point for engaging parents as intellectual resources in mathematics education. Mathematics workshops designed to honor parents’ experiences, provide practical support, and foster collaborative learning may offer a promising mechanism for strengthening family engagement in mathematics as well (Jacobbe et al., 2012; Quintos et al., 2019). A practice-oriented recommendation related to this finding is presented in Chapter 7.

6.3.2 Summary

Across Magnolia Middle School and Pacific Charter School, Latinx parents collectively articulated a shared desire to be genuine educational partners in their children’s education, and not just passive spectators. Parents described responding to school involvement structures strategically, engaging where possible and disengaging from spaces they perceived as inaccessible or unwelcoming. Across both sites, parents expressed hopes for linguistically inclusive environments, written materials to support learning at home, and opportunities to learn alongside other parents. In mathematics education specifically, parents consistently expressed interest in practical, respectful, and accessible math-focused workshops that acknowledge their experiences and build confidence. Viewed through Civil et al.’s (2005) and Moll et al.’s (1992) frameworks, parents consistently demonstrated rich funds of knowledge and a strong commitment to high academic expectations for their children. However, these assets remain only partially recognized within existing school structures, limiting the potential for sustained and equitable family–school partnerships.

6.4 Overall

Taken together, the cross-case analysis of Magnolia Middle School and Pacific Charter School reveals a clear misalignment between how parental involvement is conceptualized in school structures and documents, how school personnel interpret and implement parental involvement, and how Latinx and minoritized parents understand and practice their roles in their children's education—both broadly and within mathematics education. Across both school sites, analysis of the parent involvement structures outlined in key school documents indicates that, at its best, parental involvement is framed within the category of parents as parents (Civil et al., 2005). School personnel at both school sites suggested engaging parents in mathematics workshops, but also stated that there are significant structural and institutional constraining factors that make that suggestion wishful rather than practical. On the other hand, across both school sites, parents articulated a strong sense of responsibility for their children's academic success and described themselves as educators, advocates, learners, and sources of student support, framing themselves with the categories of parents as parents, parents as learners, and parents as leaders (Civil et al., 2005). They challenged the notion that parental involvement requires physical presence on campus and characterized their in-person involvement as strategic as they navigated structures that partially recognized or valued their contribution. Within these limited structures, parental involvement will continue to be limited to parents as parents unless the structure and attitudes towards parental involvement change.

One salient finding across both school sites is the limited opportunities for parents to engage in decision-making, as well as parents having limited resources to effectively engage in advocacy work. Across both school sites, among school personnel and parents, there is a desire to host parent math night spaces to strengthen the collaboration among parents and teachers as

well as to draw on parents as intellectual resources. Given the constraints in both school sites, physical as well as limited personnel, there is a need for a third shareholder to enter the arena of parental involvement. Partnership with community organizations or non-profit organizations with relevant knowledge and resources can provide resources to support parent-school-community collaboration and to strengthen the parents' capacity to engage in their childrens' education (Osterling & Garza, 2004; Warren et al., 2009). PIQE is such an organization. This non-profit organization has experience organizing various workshops, including family leadership and family mathematics workshops. A potential collaboration with such non-profit organizations can greatly enhance parental involvement at these two school sites, or other school sites in the San Miguel Unified School District (SMUSD).

Chapter 7: Conclusion

7.1 Introduction

This study examined how parents and school personnel in two schools serving predominantly culturally and linguistically diverse communities describe their views of parental involvement, both in general education and, more specifically, in mathematics education. To address these questions, the present study conducted document analysis, semi-structured interviews, and ethnographic field observations at two school sites in Southern California: Magnolia Middle School and Pacific Charter School. This research study presented an in-depth case study of each school site, followed by a cross-case analysis that synthesized findings across sites through the theory of funds of knowledge and the parents as intellectual resources framework (Civil et al., 2005; Moll et al., 1992). Data was collected during the 2024-2025 school year and analyzed and synthesized during the 2025-2026 school year. The results are reflective of the reality of the sites at that time, and are therefore situated in time and location.

Across both school sites, from both the school personnel's perspective and the key school documents, parental involvement was framed primarily within the category of parents as parents (Civil et al., 2005). Parents were encouraged to communicate with school personnel to find resources for their children. The relationship was primarily about caregiving rather than an academic partnership. At the same time, both school personnel and parents expressed a desire for more meaningful parental involvement, particularly in mathematics education. However, the findings from the interviews and ethnographic observations also revealed clear institutional and conceptual constraints that limited the enactment of these desires into sustained educational practices. As Barton et al. (2004) pointed out:

there exists a continuum of roles from “Helper” to “Author” along which parents can be positioned either by themselves or by others ... A single parent can be simultaneously a helper and an author depending on the space in which he or she is engaged (e.g., formal vs. personal) and the forms of capital that are activated and valued within that space. (p.9)

The data from the parents’ perspective revealed a strong sense of responsibility and a desire for meaningful involvement in supporting their children in school. Across both sites, there were clear instances of parents positioning themselves as both “parents as learners” and “parents as leaders” (Civil et al., 2005). However, bureaucratic processes, along with social and linguistic barriers and limited access to decision-making spaces, significantly constrained parents’ ability to further explore how to sustain these roles and make a lasting impact at school. This study revealed that how and why parents engage differ but expanding the ecologies of parental involvement can accommodate the wide range of parents along the continuum from “Helper” to “Author” (Barton et al., 2004).

A major finding of this study is that parents challenged the assumption that physical presence at school is a primary indicator of involvement. From the school’s perspective, parents who do not attend school events may be perceived as uninvolved. However, at least six parents in this study described how they actively support their children’s academics at home. Some explained that they do not seek school-based mathematics tutoring because they, along with other family members, are able to assist their children when needed. Several of these parents noted that they enjoy the subject, have taken advanced courses in high school or college, or have won state-level competitions in other countries. These examples highlight the need to broaden prevailing definitions of parental involvement in schools that serve culturally and linguistically diverse communities. Such definitions should include forms of engagement that occur at home but are not yet recognized by school personnel. Within current educational structures, parental

involvement at these two school sites is likely to remain within Civil's (2005) "parents as parents" category unless there is an intentional shift in both school structures and the underlying conceptualization of parental involvement.

This closing chapter discusses theoretical implications and practical recommendations that emerged from this research. It also provides recommendations for future research and offers final reflections on how schools can more equitably and meaningfully support parental involvement in culturally and linguistically diverse communities.

7.2 Theoretical Implications

Although from the school personnel's perspective, parental involvement in both school sites currently falls within the category of parents as parents (Civil et al., 2005), findings from this study suggest a shared desire—among both school personnel and parents—for more meaningful and expansive forms of parental involvement. However, translating this shared desire into practice requires conceptual and structural work. Across both school sites, parents articulated a desire for more meaningful involvement opportunities, challenged traditional parent spaces, and articulated a vision for alternative individual and collective parent learning workshops or events—a direction that some school personnel also viewed as promising.

Taken together, these findings suggest a mutual readiness to reconceptualize parental involvement in schools serving culturally and linguistically diverse communities. Three major theoretical implications are presented here to respond to the three major differences between parental involvement in elementary school and middle school noted in the interviews of this study: school structure, the mathematical content covered, and adolescent development.

7.2.1 School Structure

The key school documents for the San Miguel Unified School District (SMUSD) outline the goals and actions regarding the school system's plan for meeting academic achievement and for fostering family engagement (CDE, 2025). The plan outlined for parent engagement is broad and meant for parental involvement across grade levels. For example, the LCAP mentions that "It is important for staff and families to feel safe, welcome, and supported as well."

Theoretically, there may be similarities in how parents feel safe, welcome, and supported at each grade level (i.e., elementary, middle, and high school), but there might also be differences. Additionally, given that the school structure changes from elementary to middle school, the support needed to help parents feel welcome and supported might be different at each school and grade level. Finally, the language is too broad to be meaningful.

The school structure changes dramatically from elementary to middle school. In elementary grades, parents and students interact mainly with one teacher. Hence, the general responsibility of the parents to monitor students' progress at home or to contact a teacher was reduced to communication with mainly one teacher at school. However, in most middle schools, students in 6th or 7th grade change from having one teacher covering all subjects to having multiple single-subject teachers. The general responsibility of the parent to monitor students' progress at home then becomes more complex, as is contacting students' teachers. Such complexity is further complicated when parents have multiple students in the district, like Kyle, or if a language barrier exists between teachers and parents. Consider Paola, another parent, who recognized a critical shortage of mathematics teachers at Magnolia Middle but did not know whom to approach to address the issue. Although she attempted to contact the district, she did

not receive a response. Her experience highlights the structural challenges parents face when trying to engage as advocates within the existing educational system.

School collaboration with community-based organizations, such as PIQE, can help address this gap by providing resources that equip parents with the knowledge and skills needed to act as advocates and leaders within their school communities. Over time, as parents are equipped with the tools and growth opportunities, a gradual transformation of parental involvement practices can emerge — one in which parents exercise greater agency, deciding how to engage rather than seeking direction on what to do. Warren et al. (2009) also provide examples of what these school–community partnerships can look like in practice, such as partnering with community-based organizations to provide a broad range of services or providing community organizing sites. Further research is needed to reconceptualize parents at the middle school level as intellectual resources, as well as possible school-community collaboration to theoretically and practically strengthen such reconceptualization (Civil et al., 2005).

7.2.2 School-Level Mathematical Content

Aside from the differences in school structure, the mathematical content also changes from elementary school to middle school. Elementary mathematics focuses on number sense and arithmetic, while middle school mathematics content includes foundational content to prepare students to study algebra, statistics, and more formal geometric concepts (CDE, 2013; Hook et al., 2007). Consistent with the findings of earlier research, this study shows that it remains uncommon for mathematics teachers and school personnel in middle schools serving culturally and linguistically diverse communities to position parents as intellectual resources for mathematics education. At best, parents are often positioned as parents as parents (Civil et al., 2005). This tendency is commonly reinforced by deficit-oriented assumptions about parents’

mathematical knowledge and dispositions, particularly when parents learned mathematics outside of the United States. As a result, parents' mathematical practices, contributions, and experiences are undervalued, diminished, dismissed, or even penalized.

While most school personnel voiced a perspective assuming that parents were not intellectual resources students can draw on for mathematical support at home, the parents in this study had a wide range of comfort and familiarity with mathematical content at the middle school level. While some did express difficulty in helping their children with mathematics, others, like Paola and Yuliana, mentioned that school mathematical knowledge was a well-recognized part of their funds of knowledge.

7.2.3 Adolescent Development

In addition to differences in school structure and mathematical content, middle school students themselves undergo a period of rapid personal transformation. They are no longer children, yet not fully adults. Contrary to common stereotypes that portray this age group as unruly or irrational, research suggests that adolescents experience significant physical, cognitive, and social changes that shape their relationships with peers, family members, and school environments (Wigfield et al., 2006; Steinberg, 2007). As a result, the connections they once had with their elementary school teachers and settings may differ notably from those formed in middle school.

Similarly, the types of support students require—from both schools and families—shift as young people develop. Approaches that were effective in elementary school may no longer align with adolescents' developmental needs. This shift highlights the need to reconceptualize parental involvement at the middle school level, emphasizing forms of engagement that respond to students' evolving needs, growing independence, and emerging aspirations. For example,

researchers found that parents of middle school students are actively more involved in guiding their children's educational and vocational aspirations; that is, to a greater extent than when their children were in elementary school (Cooper et al., 1994). Additionally, "Transition to adolescence ... [represents] a key time, one at which parents and children reassess their goals and aspirations for the children's futures as well as the availability of resources that would enable the children to attain the goals" (Cooper et al., 1994, p.1). Hence, the nature, structure, and design of parent-focused supports—such as workshops and school initiatives—must also evolve to effectively prepare families to support their children's academic success in middle school and beyond. Mr. Minh, for example, alluded to how parental involvement in mathematics education at the middle school or high school level looks different from that at the elementary school level. He also alluded that direct pressure might not be the most effective way to convince a middle school student to study harder.

7.3 Practical Recommendations

Additional research is needed to deepen understanding of parental involvement in culturally and linguistically diverse communities and to identify more meaningful and equitable forms of involvement that draw on families' funds of knowledge. Future studies could build on this dissertation by implementing initiatives that both school personnel and participating parents identified as promising next steps. This section shares practical recommendations for the theoretical implications presented above: school structure, the mathematical content covered, and adolescent development.

7.3.1 School Structure - Advisory Teacher Model

Oftentimes, parents are challenged by the transition from a single-teacher model in elementary school to the multiple single-subject teachers model in middle school (Akos et al., 2004). Parents need to rapidly adjust from primarily communicating with one teacher to navigating communication with several teachers for a single child—as mentioned by Kyle from Magnolia Middle—a challenge more complex for families with multiple children in the same district. This multiple-subject teachers model limits parents’ ability to engage in a sustained, meaningful, and continuous conversation about the children’s academic well-being and progress.

One key practical recommendation to establish deeper parent-teacher relationships emerging from this study is informed by the advisory structure of the Pacific Charter School. The structure of the advisory model, in which students are paired with an advisory teacher for multiple years, facilitates more coherent and effective parent-teacher communication. One notable advantage of the long-term advisory model is the timely parent-teacher coordination of academic support whenever the need arises. Parents in Pacific Charter described receiving communication from advisory teachers when additional support, such as tutoring, was recommended or offered, allowing parents to make informed decisions promptly. In contrast, parents at Magnolia relied on grade checking or homework monitoring observations to decide when to intervene. A structured communication system with a primary point of contact nurtures proactive collaboration among school personnel and parents, which has long-term benefits for the students.

Although both parents and school personnel at Pacific Charter identified areas for improvement within this long-term advisory model, the advisory structure has the potential to benefit all stakeholders involved. With this model, parents have a consistent point of contact,

which might reduce bureaucratic barriers to meaningful involvement. At the same time, teachers in the advisory role have an opportunity to deepen relationships with a smaller group of families, creating conditions for more meaningful and sustained parental involvement. The advisory model, or a similar model fitted to the reality of the middle school, offers a practical starting point for middle schools in culturally and linguistically diverse communities seeking to strengthen parent-school communication. With time, as well, it could be refined to address the challenges around trust, language and culture encountered by the parents at Pacific Charter.

7.3.2 School-Level Mathematical Content in Mathematics Workshops

Parents in this study described a desire for a space where “something about math” (Yuliana) could be explored in a way that felt approachable and engaging: a “light subject” rather than something intimidating (Yuliana & Kyle). They envisioned a setting where parents could “learn basic math” (Sonia) and develop the skills needed to better support their children, as noted by Kyle and Emma. These mathematics workshops may provide valuable insight into how schools in communities serving minoritized families can foster more collaborative and academically meaningful parent–school relationships.

Many schools have experience with hosting some kind of family mathematics workshops, and researchers are drawing on mathematics workshops to learn how to help families engage more meaningfully and positively with mathematics (Kling et al., 2026). Family Math Fun Festivals or *Tertulias matemáticas* (mathematical get-togethers) are two examples of such workshops in which parents can come together to explore mathematics concepts collectively (Kling et al., 2026; Quintos et al., 2019). These spaces can serve at least two complementary purposes: first, to understand how parents draw on their funds of knowledge to support their children’s mathematical understanding; and second, to engage parents in a collective dialogue

about mathematical learning and instructional practices. The content of the Family Math Fun Festivals is a well-chosen “low-floor, high ceiling” mathematics task that is accessible to everyone but can be extended to challenge learners. The content for the *Tertulias matemáticas* with the parents can be informed through conversations with mathematics teachers and parents, ensuring the *Tertulias* are both relevant to classroom content and responsive to the families’ interests, needs, and lived experiences. As Kyle, a parent interviewed, mentioned, mathematics workshops could also be an opportunity to get “parents involved, teaching other parents in math.”

Furthermore, in addition to bringing the parents together, future research can also explore the implementation of joint parent-teacher mathematics workshops. These collaborative *Tertulias* provide opportunities for both parents and teachers to interact with each other and explore mathematical concepts and learn from one another’s perspectives and experiences (Quintos et al., 2024). Joint *Tertulias* have the potential to challenge prevalent deficit-based assumptions about parents' roles and contributions to mathematics education. Additionally, they also have the potential to position parents as intellectual resources and co-constructors of knowledge. Such spaces can also contribute to the shift of “traditional power dynamics between parents and teachers” in schools serving culturally and linguistically diverse communities (Quintos et al., 2024, p. 2). Future studies might research how, through the use of iterative planning and study cycles, *Tertulias* and joint *Tertulias* can be implemented in these schools in a sustainable way that nurtures positive parent-teacher interactions and supports meaningful parental involvement, without adding undue burden to already burdened teachers.

These parent-teacher mathematics workshops could serve multiple purposes, including helping parents understand how mathematics shapes their children’s educational trajectories

(Warren et al., 2009). The following interview excerpt illustrates this point. At the conclusion of her interview, Susana shifted the focus of the conversation by asking several questions about the role of mathematics in the students' educational path:

Interviewer: Is there anything else you would like to add?

Susana: No, but I do have a question. Are there college-level courses that high school students can take while still in high school, or must they wait until they enroll in college?

Interviewer: Yes, students can take college-level courses while still in high school.

Susana: Who typically asks for those courses—the parents or the students?

Interviewer: At Pacific Charter, for example, students can enroll in Advanced Placement (AP) courses, such as AP Calculus. ...

Susana: Do all career paths require mathematics?

Interviewer: Yes. During the first two years of college, students typically complete general education requirements, including mathematics, English, and science—similar to A-G requirements in high school. In the final two years, students focus on courses related to their major.

Susana: It's important, then, for students to get good grades in mathematics?

Interviewer: Yes, I think so. Also, the better grades they get, the classes in college are a lot easier. And also, better grades mean more scholarships they can be eligible for.

Susana: If a student wants to pursue a career in biology but struggles with mathematics, what options do they have?

Interviewer: Colleges offer tutoring and academic support services. Additionally, there are programs designed to support students, including Latinx students, to help them succeed academically.

Susana: How do students access these resources?

Interviewer: At the college. In college, students are expected to be more independent. However, many institutions offer first-year support programs, and students typically receive information about available resources upon enrollment.

This excerpt highlights one parent's desire to fully understand the education process.

Similarly, four other parents (Susana, Aurora, Emma, Maria, and Elora) mentioned that it would be beneficial to have opportunities to share resources, access tutoring information, and familiarize themselves with current mathematics teaching methodologies. These parent-teacher mathematics workshops could provide a dedicated space to explore these aspects, fostering greater collaboration and understanding between schools and families.

The parents' mathematics workshops were mentioned by both parents and school personnel as a helpful space to consider including on campus. However, one structural constraint also mentioned by both school sites is the lack of available school personnel to sustain such efforts. This limitation highlights an opportunity for growth to conceptualize family engagement as a shared responsibility between schools and community-based organizations. Partnerships with community-based organizations can serve as a critical mechanism for addressing these staff shortages and engaging families in meaningful and consistent ways. Organizations such as PIQE can bring both the expertise and the infrastructure to support parent involvement (Auerbach, 2012). PIQE's experience in facilitating family mathematics workshops positions them as valuable partners in expanding parents' access to knowledge about mathematics education, such as curricular expectations and available academic support, thereby equipping parents with the knowledge to better support their children with their mathematics education. By leveraging community partnerships, schools can move beyond resource restraints and create more sustainable, inclusive spaces for parents to engage with and support their children's mathematics learning.

7.3.3 Adolescent Development - Content of Mathematics Workshops

Both parents and school staff recognize that middle school is a time of rapid change. For example, Kyle, a parent at Magnolia Middle, noted that “a lot of changes are happening very quickly” during these years. He emphasized that it is important for both parents and students to understand that these changes are normal. He also noted that when parents and children share this understanding, they are better able to communicate and work together on school-related tasks. Similarly, Mr. Minh, the mathematics specialist at Pacific Charter, pointed out that parental involvement also needs to change during this stage. Intrusive approaches may become

less effective, especially if students begin to resist schoolwork or disengage from learning. As adolescents seek more independence, both parents and educators must adjust how they support them.

Parent–teacher workshops can help address these challenges. Whether designed for parents alone or in collaboration with school staff, these workshops create space to discuss practical strategies for supporting students’ learning in math. These workshops can also be a space in which more general information is shared. Workshops can help parents better understand how to guide their children through puberty, a time of significant physical, emotional, and cognitive development. Including such topics in workshops may make them more relevant and useful to culturally and linguistically diverse communities.

7.3.4 Adopting Improvement Cycles as a Mode of Operation

Unfortunately, most educational reforms—particularly in mathematics education—are often abandoned or replaced entirely before a complete and thorough assessment of their effectiveness (Schoenfeld, 2014). Continuous improvement requires acknowledgement that lasting change emerges from small and regular iterative adjustments rather than rapid, large-scale educational reforms (Shakman, 2020). Applying this insight, reflection, and planning cycles to parental involvement efforts, then, can strengthen the parent-school relationships by refining practice over time and building shared institutional capacity without burdening school personnel or parents.

A promising approach to reconceptualize parental involvement is the use of improvement cycles, which emphasizes gradual, interactive refinement of practice to support sustained implementation (Kittelman et al., 2022). Improvement cycles are a mode of operation through which educational organizations can, over time, systematically test, assess, and adjust specific

aspects of their practice. A common model already used in various fields is the Plan-Do-Study-Act (PDSA) cycle (Taylor et al., 2014). Through deliberate implementation of an improvement plan, such as PDSA cycles described above, educational organizations can explore how adopting a parental involvement framework that positions parents as intellectual resources can contribute to a shift in thinking and practice in schools serving culturally and linguistically diverse communities. The Civil et al. (2005) framework, which conceptualizes parental involvement in mathematics education, offers a strong theoretical foundation of how parental involvement can transform from its current limited opportunities to more expansive and empowering categories—such as parents as learners, teachers, or leaders—while responding to the local contexts. The PDSA framework provides an implementation vision and method.

For example, schools can explore implementing the practical recommendations explored above. Schools can systematically learn how an advisory model can be adapted and refined to their specific educational contexts; learn how a collaboration with a non-profit community organization can, with time, strengthen the parent-school partnerships; and learn how to broaden the way parents become meaningfully involved in school while responding to the rapid changes in middle school students. Hence, parental involvement is reconceptualized as a learning process, rather than a fixed set of practices. It is improved over time, incorporating practical implementations best suited to the local contexts (Kennedy & Jackson, 2022).

7.4 Future Studies

Given the limitations of the present study, other areas of this work were not fully explored. One consistent finding in this study is that parents, including Latinx immigrant parents, express a strong desire to support their children academically. However, immigrant parents, who usually completed their elementary and middle school education in a different country, often face

significant barriers when assisting their children, especially with mathematics. Deficient-oriented views of parents' linguistic backgrounds and prior mathematics educational experiences can discourage immigrant parents from sharing with their children or their teachers. As prior research has shown, and as observed in this study, students of immigrant parents often reject their parents' mathematical explanations when these procedures differ from those emphasized by their teacher at school, leading children to perceive their parents' knowledge as incorrect or unacceptable (Colegrove & Krause, 2017; Quintos & Civil, 2008). These interactions position parents as ineffective sources of mathematical support, which undermines and diminishes parents' potential role as home-based intellectual resources.

These miscommunications often intensify as students progress to higher grade levels and mathematics becomes more abstract (Williams et al., 2020). Without intentional efforts to address such a disconnect, parents may be positioned—both at home and in school contexts—as lacking relevant funds of knowledge for mathematics learning. Future research is needed to better understand these barriers and identify strategies for supporting multilingual and immigrant parents in leveraging their linguistic, cultural, and experiential resources (Civil & Planas, 2009).

7.5 Conclusion

This dissertation began with Ella Baker's call to empower people to face a "system that does not meet [their] needs and devising ways to change that system" (Moses & Cobb, 2001, p. 193). In the context of mathematics education, Robert Moses's work through the Algebra Project offers an example of how sustained, community-centered efforts can mobilize families and benefit thousands of students across the United States. Within the context of this study, parental involvement in mathematics education—particularly in schools serving culturally and linguistically diverse communities—is an example of a system that needs change and that,

through sustained effort, could be transformed. While strengthening parental involvement in mathematics education may not, in itself, constitute a radical change in our society, it does represent an asset-based shift towards recognizing, and tapping into, an intellectual resource that has been overlooked in culturally and linguistically diverse communities: parents themselves.

When viewed through frameworks such as parents as intellectual resources and funds of knowledge, it becomes clear that parents' cultural, linguistic, and experiential resources remain underutilized—especially in mathematics education. Yet, as suggested by the findings in both school sites, the shared desire among parents and school personnel for more meaningful collaborative forms of parental involvement signals a possibility for change. Meaningful parental involvement, however, requires a change in school structure and parent-school communication practices that acknowledge and respect parents' linguistic, cultural, and social realities. It also requires the creation of intentional spaces that engage parents in academic content, including mathematics. Finally, it requires an expanded definition of parental involvement that goes beyond physical presence on campus, but instead includes a variety of ways parents can support learning at home and within their communities.

Through sustained, small-scale, and community-informed PDSA cycles, schools can begin to redefine parental involvement in ways that honor parents' realities and expertise. When schools intentionally structure communication, parent learning opportunities, and school-parent partnerships in ways that respect and build upon families' funds of knowledge, a new norm of parental involvement—one grounded in trust, mutual learning, and shared responsibility—can emerge in culturally and linguistically diverse communities. Taken together, this dissertation contributes to the growing body of literature on parental involvement in middle school mathematics education by highlighting both the limitations of current school structures

and the possibilities that emerge when parents, in culturally and linguistically diverse communities, are recognized as knowledgeable, committed, and an essential educational partner in their children's education.

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Appendix A: Interview Protocol for Administrators, Faculty, and School Personnel on Parental Involvement

Instruction to the Interviewer: *Explain the study and ask the participant if they have any questions. Tell the participant that the interview should take about 30 minutes. The interview is semi-structured, so while it is important to address each of the questions listed below, the order of questions can change depending on how the participant responds. It may also be possible that the participant will answer some questions while responding to others, in which case you may skip them.*

Personal Context and Background

Interviewer: *This section asks about yourself and your experiences.*

1. Describe yourself and your role at [School Name].
 - a. How long have you been part of the [School Name] community?

Perceptions of the School Culture and the Role of Parents

Interviewer: *This section asks about the different events, structures, and partnerships to build and sustain parental involvement at school.*

2. Describe where parents go or who they talk to regarding their child's(ren) academics and well-being at [School Name] (bilingual receptionist, parent coordinator, etc.) and how parents have found them helpful.
 - a. What can additional personnel be responsible for? How would it be helpful?
3. Describe the different activities or school events at [School Name] to build and sustain parental involvement and how parents have found them helpful.
 - a. What about different activities to build and sustain parental involvement related to mathematics?
 - b. What could be additional activities or school events and how would they be helpful?
4. What are the languages used in school events and how do parents navigate these events if there is a language barrier (i.e. graduation, coffee with principal)?
5. Describe the different structures at [School Name] to build and sustain parental involvement (i.e. parent center) and how parents have found them helpful.
 - a. Are there structures particularly for mathematics?
 - b. What could be additional structures and how would they be helpful?
6. Describe the organizations that [School Name] collaborates with to build and sustain parental involvement, particularly for mathematics education.
 - a. How have parents found them helpful?
 - b. How would additional partnerships be helpful?
7. What are documents that the administration, faculty, or school personnel draws on that outline the schools' parent involvement hopes?

Perceptions of the Neighborhood Culture and the Role of Parents

Interviewer: *This section asks about the different activities for parents you know of in the community.*

8. Describe the activities or locations in the community parents can go to ask for academic support/tutoring for their child (i.e. enrichment programs, homework help).
 - a. Describe activities or locations in the community for mathematics support.
9. Describe any activities or locations in the community where parents can go to learn different things, especially activities related to mathematics education.
10. Describe any activities or events in the community facilitated by parents, especially related to mathematics education.
 - a. How would such a space be helpful?
11. Describe any parent leadership development activities in the community.
 - a. Describe any activity related to mathematics education.
 - b. How would such a space be helpful?
12. Describe anything else related to parental involvement in school or mathematics education that you have not had the opportunity to share with me.

Appendix B: Interview Protocol for Parents

Instruction to the Interviewer: *Explain the study and ask the participant if they have any questions. Tell the participant that the interview should take about 45 minutes - one hour. The interview is semi-structured, so while it is important to address each of the questions listed below, the order of questions can change depending on how the participant responds. It may also be possible that the participant will answer some questions while responding to others, in which case you may skip them.*

Personal Context and Background

Interviewer: *This section asks about yourself, your family, and your experiences when you learned mathematics in school.*

1. Describe yourself and your family.
 - a. What kind of work do you do?
2. What is your connection to [School Name]?
 - a. How long have you been part of the [School Name] community?
3. What made you send your child(ren) to [School Name]?
4. Describe your experience learning mathematics when you were in school.

Perceptions of the School Culture and the Role of Parents

Interviewer: *This section asks about the different activities you have been part of at school and your role in those activities.*

5. Describe the different activities you have been part of at [School Name] (i.e. meeting with teachers, back-to-school night,..)
 - a. What motivated you to join?
6. What are the languages used in school events?
 - a. How do you navigate these school events if everything is only in English?
7. Describe where you go or who you talk to regarding your child(ren)'s academics and well-being at [School Name].
 - a. Describe where you go or who you talk to regarding your child(ren)'s mathematics education.
8. Describe any activity at school you know of /are part of for parents to learn mathematics.
 - a. If there are, are there reasons why you do not participate (i.e. timing, childcare issues, language, etc.)
 - b. If there is none, how would such activities be helpful?
9. Describe any activity facilitated by parents at school you know of / are part of.
 - a. If there are, are there reasons why you do not participate (i.e. timing, childcare issues, language, etc.)
 - b. If there is none, how would such activities be helpful?
10. Describe any parent leadership development activities for parents at school you know of / are part of.
 - a. If there are, are there reasons why you do not participate (i.e. timing, childcare issues, language, etc.)

- b. If there is none, how would such activities be helpful?
- 11. Describe any place on campus you can go as a parent to access any resource (academic or not).
 - a. Describe what motivated you to join.

Perceptions of the Neighborhood Culture and the Role of Parents

Interviewer: *This section asks about the different activities for parents you know of in the community and your role in those activities.*

- 12. Describe the different activities in your community for parents you have been part of.
 - a. If there are, are there reasons why you do not participate (i.e. timing, childcare issues, language, etc.)
 - b. If there is none, how would such activities be helpful?
- 13. What are the languages used in these events?
 - a. How do you navigate these school events if everything is only in English?
- 14. Describe the activities or individuals you can go to as a parent in your community to ask for academic support/tutoring for your child.
 - a. What about mathematics support/tutoring for your child
- 15. Describe any activity in the neighborhood you know of/are part of where parents can go to learn mathematics.
 - a. If there are, are there reasons why you do not participate (i.e. timing, childcare issues, language, etc.)
 - b. If there is none, how would such activities be helpful?
- 16. Describe any activity facilitated by parents in the community you know of/are part of.
 - a. Are there any of these activities regarding mathematics education?
 - b. If there is none, how would such activities be helpful?
- 17. Describe any parent leadership development activities for parents in the community you know of/are part of.
 - a. Are there any of these activities regarding mathematics education?
 - b. If there is none, how would such activities be helpful?

Appendix C: Spanish - Interview Protocol for Parents

Instrucción para el entrevistador: *Explique el estudio y pregunte al participante si tiene alguna pregunta. Dígale al participante que la entrevista durará unos 30 minutos. La entrevista es semiestructurada, por lo que si bien es importante hacer cada una de las preguntas que se enumeran a continuación, el orden de las preguntas puede cambiar dependiendo de cómo responda el participante. También es posible que el participante responda algunas preguntas mientras responde otras, en cuyo caso puede omitirlas.*

Contexto Personal y Antecedentes

Entrevistador: *Esta sección pregunta sobre usted, su familia y sus experiencias cuando aprendió matemáticas en la escuela.*

1. Describese a usted y a su familia.
 - a. ¿Qué tipo de trabajo hace?
2. ¿Cuál es su conexión con [Nombre de la escuela]?
 - a. ¿Cuánto tiempo ha sido parte de la comunidad de [la escuela]?
3. ¿Qué le/la hizo decidir enviar a su(s) hijo(s) a [la escuela]?
4. Describa su experiencia aprendiendo matemáticas cuando estaba en la escuela.

Percepciones sobre la Cultura Escolar y el Papel de los Padres

Entrevistador: *Esta sección pregunta sobre los diferentes lugares/juntas/grupos de los que has tomado parte en la escuela y su papel en esos lugares/juntas/grupos.*

5. Describa los diferentes eventos/juntas/grupos a los que usted ha ido en [la escuela] (es decir, reunión con profesores, noche de regreso a clases, junta de padres...)
 - a. ¿Qué le/la motivó a unirse a estos eventos/juntas/grupos?
6. ¿Qué lenguajes se usan en los eventos escolares?
 - a. ¿Cómo le hace si estos eventos solo son en inglés?
7. Describa adónde va o con quién habla con respecto al nivel académico y el bienestar de su(s) hijo(s) en [la escuela].
 - a. Describa dónde va o con quién habla con respecto a la educación matemática de su(s) hijo(s).
8. Describa cualquier lugar/junta/grupo en la escuela que conozca o frecuente para que los padres aprendan más sobre las matemáticas.
 - a. Si hay alguno, ¿hay razones por las cuales no participa (e.n. el horario, no tiene quien cuide a sus hijos, lenguaje, etc.)
 - b. Si no hay ninguno, ¿para qué sería bueno tal lugar/junta/grupo?
9. Describa cualquier lugar/junta/grupo en la escuela facilitado por padres que conozca o frecuente.
 - a. Si hay alguno, ¿hay razones por las cuales no participa (e.n. el horario, no tiene quien cuide a sus hijos, lenguaje, etc.)
 - b. Si no hay ninguno, ¿para qué sería bueno tal lugar/junta/grupo?

10. Describa cualquier lugar/junta/grupo en la escuela de desarrollo de liderazgo para padres que conozca o frecuente.
 - a. Si hay alguno, ¿hay razones por las cuales no participa (e.n. el horario, no tiene quien cuide a sus hijos, lenguaje, etc.)
 - b. Si no hay ninguno, ¿para qué sería bueno tal lugar/junta/grupo?
11. Describa cualquier lugar/junta/grupo en la escuela al que pueda ir como padre para saber de cualquier recurso (académico o no).
 - a. Describa el motivo a ir/unirse a ese lugar/junta/grupo.

Percepciones sobre la Cultura de la Comunidad y el Papel de los Padres

Entrevistador: *Esta sección pregunta sobre los diferentes lugares/juntas/grupos para padres que conoce en la comunidad y su papel en esos lugares/juntas/grupos.*

12. Describa los diferentes lugares/juntas/grupos en su comunidad para padres que conozca o frecuente.
 - a. Si hay alguno, ¿hay razones por las cuales no participa (e.n. el horario, no tiene quien cuide a sus hijos, lenguaje, etc.)
 - b. Describa el motivo de ir/unirse a esos lugares/juntas/grupos.
13. ¿Qué lenguajes se usan en los eventos escolares?
 - a. ¿Cómo le hace si estos eventos solo son en inglés?
14. Describe los lugares/juntas/grupos o personas a los que puede acudir como padre en su comunidad para solicitar apoyo académico/tutoría para su hijo.
 - a. Describa a donde va para recibir ayuda con las matemáticas.
15. Describa cualquier lugar/junta/grupo en la comunidad que conozca o frecuente al cual los padres pueden ir a aprender matemáticas.
 - a. Si hay alguno, ¿hay razones por las cuales no participa (e.n. el horario, no tiene quien cuide a sus hijos, lenguaje, etc.)
 - b. Si no hay ninguno, ¿para qué sería bueno tal lugar/junta/grupo?
16. Describa cualquier lugar/junta/grupo facilitado por padres en su comunidad que conozca o frecuente.
 - a. ¿Existe alguno de estos lugares/juntas/grupos respecto a la educación matemática?
 - b. Si no hay ninguno, ¿para qué sería bueno tal lugar/junta/grupo?
17. Describa cualquier lugar/junta/grupo de desarrollo de liderazgo para padres en su comunidad que conozca o frecuente.
 - a. ¿Existe alguno de estos lugares/juntas/grupos respecto a la educación matemática?
 - b. Si no hay ninguno, ¿para qué sería bueno tal lugar/junta/grupo?