Parental Perceptions of School-Based Collaborative Practices: A Study of Parents of School-Aged Students Receiving Special Education Services

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Erica Estelle Wood

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Slippery Rock University

Department of Special Education

A Dissertation written by
Erica E. Wood
Bachelor of Science in Education, The Pennsylvania State University, 2003
Master of Education in Special Education, George Mason University, 2008
Doctorate of Education in Special Education, Slippery Rock University, 2025

Approved by

_____, Title: Dr. Ashlea Rineer-Hershey, Professor
Dissertation Chair

Eric Bieniek (Nov 19, 2025 09:32:48 EST)
_____, Title: Dr. Eric J. Bieniek, PhD, BCBA-D, Associate Professor
Dissertation Committee Member

Dr. Todd Oswald (Nov 19, 2025 09:53:07 EST)
_____, Title: Dr. Todd Oswald, Principal
Dissertation Committee Member

Accepted by

_____, Dean, College of Education, Slippery Rock University of Pennsylvania
A. Keith Dils, Ed.D.

Abstract

This study examined parents' perspectives on school-based collaborative practices for students receiving special education services. A convergent mixed-methods design was employed, utilizing a web-based survey (n = 160) and virtual interviews (n = 8) to identify the practices parents value most, the frequency at which they experience these practices, and how preferences for most-valued practices vary across demographic characteristics. Findings indicate that parents most strongly value the relational practices of open communication, trust, and mutual respect. Similar, but slightly lower valued, were the structural practices of collaboration. Parents reported high rates of experiencing the practices of each domain of collaboration. However, differences emerged when the data were sorted by parent race/ethnicity, disability category, and student age, in the value placed on the practices. Interviews revealed additional data supporting parents' need for a focus on strong relational practices and structures to facilitate collaboration with school-based teams. These results suggest that effective collaboration is based upon both relational and structural practices. Schools are recommended to reinforce facilitators of collaboration while addressing barriers to strengthen family-school partnerships and improve the outcomes for students with disabilities.

Keywords: collaboration, special education, parent perspectives, IEP, school-based practices

Dedication

This dissertation is dedicated to my parents.

To my dad, who taught me to find my “rocking chair pace” and reminded me that once you do, you can go on forever. Your love and lessons continue to steady me.

To my mom, your hard work, resourcefulness, and strength have shaped every part of who I am. You’ve shown me that with love and steadfast perseverance, we can accomplish anything.

I carry you both in all that I do.

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I wish to express my deepest gratitude to all who have supported me throughout this doctoral journey.

To my husband, Alex, there is absolutely no one else in this world that I would want to ride the see-saw of life with; you are the BEST. None of this would have been possible without you. I love you.

To my girls, Abigail and Emma, you are my greatest joy and will forever be your dad's and my greatest contribution to this world. You two will always be able to accomplish what you put your hearts and minds into. I love you.

To my dissertation committee, I appreciate all of your guidance and support throughout this journey. Dr. Ashlea Rineer-Hershey, thank you for believing in me and this study; I knew it was a stretch, but your confidence in me kept this dissertation progressing. Dr. Eric Bieniek, thank you for pushing me to go further; you knew I had it in me, I just needed your encouragement to dig deeper. Dr. Todd Oswald, thank you for taking a chance on me years ago. Your belief in me and guidance have shaped me into the professional and scholar I am today.

Finally, I am grateful to all my family, colleagues, and friends who checked in, offered encouragement, advice, or a listening ear along the way. Your support, in all of its many forms, has made this all possible.

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Chapter 1 – Introduction

Overview

The United States Department of Education, established in 1867, did not formalize efforts to improve education for all students, regardless of their racial background, economic status, or abilities, until the 1960s and 1970s (U.S. Department of Education [ED], 2024). These efforts addressed the growing educational gaps between students of varying economic backgrounds and racial identities, those with disabilities, and their peers in regular education through increased federal education funding. Focus was put into developing practices based on standards, measuring these standards, and accountability for the results of their implementation (Edgerton & Desimone, 2019).

Starting in 1975, with the signing of the Education for All Handicapped Students Act (EHA) into law, students with disabilities (SWD) gained more visibility. They were to receive a Free and Appropriate Education (FAPE) in every state (Rineer-Hershey & Mild, 2020). This law created momentum away from the practices of the 1950s and 60s when those identified with disabilities were underserved regarding their needs and, at times, placed in highly restrictive environments (U.S. Department of Education [ED], 2024). Through the reauthorization of the EHA in 1990, the act was renamed the Individuals with Disabilities Education Act (IDEA), and reauthorizations have been made since, each providing additional support for students with disabilities. Unfortunately, despite these laws and their intended outcomes, SWD still largely underperform when compared to their peers without disabilities.

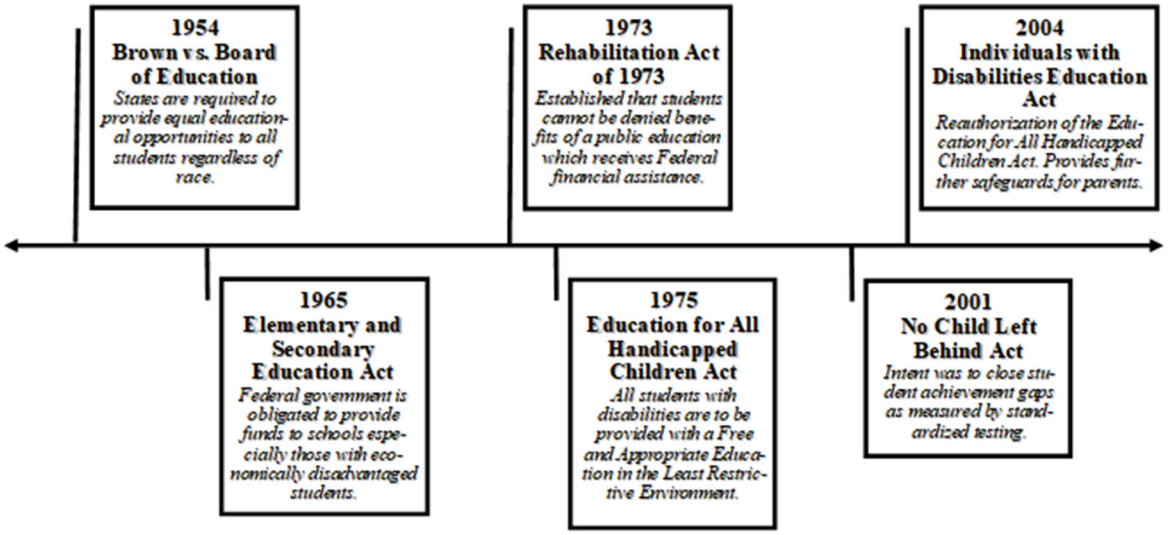
Statement of the Problem

The academic disparities SWDs face are a grave concern, as they persist despite decades of legislative efforts. Figure 1 highlights some of the legislation passed since the mid-1950s. Each

provides additional support and protection to identified students (Essex, N. L. (2016) *School law and the public schools: A practical guide for educational leaders.* (6th ed.) Pearson.)

Figure 1

Special Education Legislation Timeline



The academic discrepancies between SWDs and their regular education peers are evident in achievement scores for reading and mathematics. According to the National Assessment of Educational Progress [NAEP] (n.d.), standardized scores for public school SWDs assessed in grade four mathematics have continued to lag compared to those of their peers without disabilities. In 1996, SWDs scored an average of 20 points below their peers in mathematics, and in 2022, this difference had grown to a 28-point differential (NAEP, n.d.). In reading, fourth-grade SWD were performing on average 40 points below their peers and had shown no improvement in their performance in 2022 (NAEP, n.d.). These discrepancies for elementary-aged students are not limited to mathematics and reading; they are also present in science, writing, U.S. History, and many other subjects. These inequities also extend beyond standardized

testing; SWDs also experience lower rates of motivation in school, enrollment in post-secondary education, and gainful post-secondary employment and higher rates of retention, school dropout, truancy, and absenteeism (Community and Youth Collaborative Institute [CAYCI], 2019).

A proven approach to improving these outcomes for SWD is a collaboration between stakeholders, specifically families and school districts (Anderson-Butcher & Ashton, 2004; Daaboul, 2022). Each party provides essential components to meet the needs of and improve outcomes, but they can gain more traction and momentum when they work collaboratively (Anderson-Butcher & Ashton, 2004). Bringing attention to and evaluating practices utilized by school districts to collaborate with parents is needed to address areas for improvement.

Models and Frameworks

This study is structured based on a researcher-developed logic model. This model accounts for the direct and indirect factors influencing SWD's in- and post-school outcomes (i.e., the amount of collaboration, parents, and school teams). The belief is that with improved parental involvement and engagement practices, collaboration between schools and parents will increase and become more effective. Currently, these practices occur, but not in capacities that have a significant impact. Understanding how parents perceive the current practices utilized by schools to engage and collaborate with parents and their potential to increase the benefit is crucial to achieving this goal. This study can provide insight into strengths and weaknesses in school practices to guide needed changes in collaborative practices to increase special education student performance in school and their post-secondary lives.

Many models/frameworks exist to provide structure and guidance to school districts on involving and engaging parents to foster collaborative relationships. For this study, the Dual-Capacity Building Framework for Family-School Partnerships (Mapp & Bergman, 2019), the

Hoover-Dempsey & Sandler Model of Parental Involvement Process (Hoover-Dempsey et al., 2005), and the Sunshine Model of Trusting Family-Professional Partnerships (Turnbull & Turnbull, 2021) were reviewed. These models provide districts with the structure to develop their practices to uphold current parental involvement and engagement policies based on No Child Left Behind (NCLB, 2001), the Individuals with Disabilities Education Act (IDEA, 2004), and the Every Student Succeeds Act (ESSA, 2015). All of these mandate schools enact programs to develop collaborative relationships with parents.

Collaboration Between Stakeholders

The Cambridge Dictionary (n.d.) defines collaboration as "the situation of two or more people working to create or achieve the same thing" (Definition One). This definition remains consistent, though it takes on additional nuance when applied in the context of education. In the literature on school and family collaboration, it can be defined as two or more stakeholders working together and sharing responsibilities to achieve a common goal(s) (Cowan et al., 2004; Gardner & Cary, 1999; Lawson & Barkdull, 1999). However, collaboration does not occur just because schools have implemented practices and initiatives or adopted previously mentioned models or frameworks. Collaboration, as per the work of Lawson and Barkdull (2001), is built upon five frameworks that address the multitude of student needs in school. These frameworks are intraorganizational, interagency, interprofessional, community collaboration, and family-centered. The collaboration must also be structured to be effective, and this can occur only when clearly defined.

Griffiths et al. (2021) systematically reviewed the literature on collaboration to develop a universal model for schools. Through their analysis, the researchers were able to identify nine key elements needed to foster collaboration: (a) open communication, (b) trust, (c) mutual

respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, (h) shared decision making, and (i) implementation. When these elements were present, they provided the structure for the building blocks of collaboration: (a) relationship building, (b) active participation, (c) implementation, to ultimately reach (d) collaboration (Griffiths et al., 2021).

Need for the Study

Even with the available frameworks, models, and building blocks, a disconnect remains between implementing policies at the district level and actual levels of parental involvement and engagement, which are essential components of collaboration. This is evident alone through the measurement of Indicator 8- School-Facilitated Parent Involvement reported in the State Performance Plan (SPP), a federally mandated report each state must provide to describe their compliance with IDEA and the outcomes for their SWD (U. S. Department of Education [ED], 2022). In the 2020-2021 school year, the state rate did not meet the SPP target rate (Pennsylvania State Data Center, 2024).

Just as data would be collected to determine why a student is failing to progress in each area, the same must be done to improve parental collaboration. Mattingly et al. (2002) highlight the lack of parental involvement and assessment of engagement programs. Without data to inform practices, school districts and the state of Pennsylvania will continue to fall below low target rates and fail to implement policies effectively (Kessler-Sklar & Baker, 2000), impacting the ability to collaborate with families to benefit their students.

Barriers to Collaboration

Challenges and barriers to developing and growing these collaborative relationships present on the school and familial side. Districts, often without intending to do so, can employ

ineffective and exclusive practices when collaborating with families. These actions can impede the families' abilities to be actively involved and engaged in their child(ren)'s education(s), especially with their special education services (Christenson, 2003; Epstein & Dauber, 1991; Hoover-Dempsey & Sandler, 1997). Specifically, schools have been found to engage in minimal contact with parents due to schedule conflicts, language barriers, or the belief that parental collaboration will not be beneficial (Christenson, 2003; Epstein & Dauber, 1991; Hoover-Dempsey & Sandler, 1997). If and when contact is established, schools have been found to employ further ineffective strategies to engage parents through excessive paperwork, educational jargon, and confusing procedures (Mueller & Vick, 2017).

Parental barriers can be present in the form of (a) limited social capital (Bourdieu, 1986), (b) long-held parental beliefs regarding education (Harry et al., 1995), (c) time and scheduling challenges, (d) parents personal, educational history, (e) previous interactions with school, (d) beliefs about disability, (e) lack of resources to enable attendance at meetings, (f) low sense of efficacy, (i) unmet basic needs in the home, and (j) communication and language barriers (Cowan et al., 2004; Goodall, 2017; Kalyanpur, et al., 2000). On the familial side, there are additional barriers to collaboration. School practices must assess and reflect upon these barriers. Failure to do so will enable the maintenance of inequities in educational outcomes for students with disabilities.

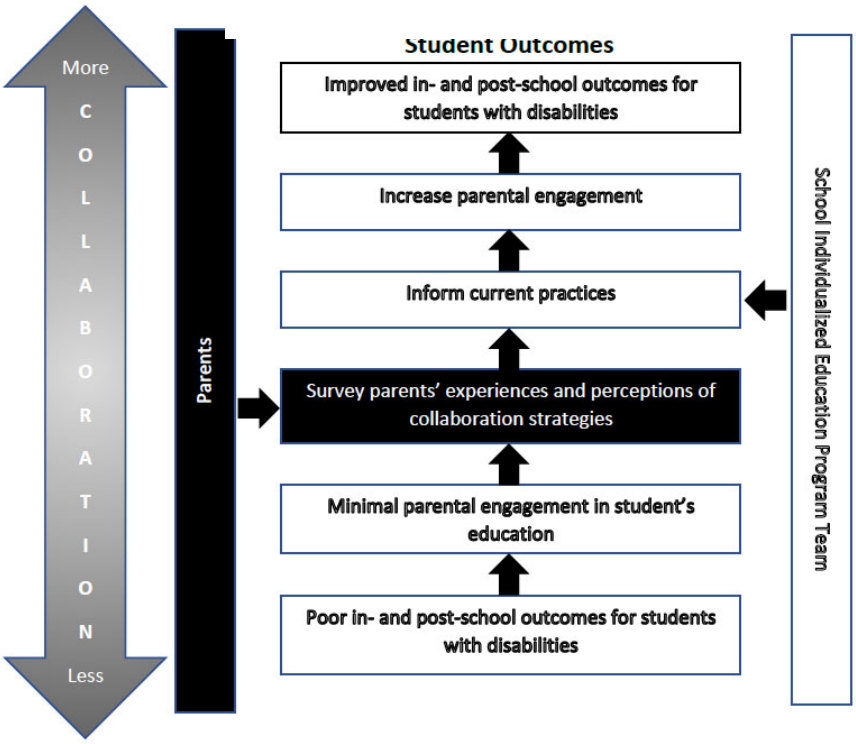
Logic Model

Figure 2 presents the logic model for this study, which is based on the work of Chang (2021). This model illustrates factors that can directly and indirectly influence SWD (i.e., the amount of collaboration, parents, and school teams). The study's primary goal is to examine parental perceptions of school-based practices within each domain of collaboration. Improving

collaboration can significantly enhance SWD's in- and post-school outcomes. Understanding how parents perceive the current practices utilized by schools to engage and collaborate with parents and their potential to increase the benefit is crucial to achieving this goal. This study can contribute to a brighter future for students with disabilities, with improved outcomes through increased collaboration.

Figure 2

Logic Model



Note. Adapted from Chang, 2021.

This dissertation examines parents' perceptions of school-aged students with disabilities (SWD) attending public schools in Pennsylvania, focusing on school-based collaborative practices within and surrounding the provision of special education services. In addition, this study seeks to determine if relationships exist between parental perceptions and their

race/ethnicity and their students' demographics (e.g., grade level, area of disability). The survey instrument and interview questions utilized for this study were researcher-developed based on previously established and vetted parental engagement questionnaires, existing literature on collaboration, and Pennsylvania's State Performance Plan Indicator 8 – School Facilitated Parent Involvement measure (Pennsylvania Training and Technical Assistance Network, 2018).

Research Questions and Statement of Purpose

There are four research questions for this study.

1. What do parents believe to be the most valuable school-based practice in each of the domains of collaboration (i.e., (a) open communication, (b) trust, (c) mutual respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, (h) shared decision making, and (i) implementation)?
2. Is there a relationship between demographics (i.e., (a) student's race/ethnicity, (b) student's age, and (c) student's disability category) and what parents deem the most valuable school-based collaborative practice in each domain?
3. How often do parents experience the practices of each collaboration domain when engaging with the school district regarding their student's special education services?
4. What barriers and facilitators of parental collaboration exist for parents of school-aged students receiving special education services, in each of the domains of collaboration?

This study will contribute to the literature on parental engagement of those with school-aged children receiving special education services. Contributions will be made by identifying the value parents see in identified practices for parental engagement. In addition, data on the rates at which parents experience each of the practices within each collaboration domain will be

collected to look for alignment with the practice deemed most valuable to parents. This study will also provide school districts with additional data regarding perceptions of collaborative practices classified by demographics. Lastly, barriers to and facilitators of parental engagement will be explored to inform school-based practices.

Limitations

This study presents three limitations that could impact the results. The first limitation is that participants will only be from Pennsylvania school districts. The data derived from this survey could fail to be representative of the population of school-aged special education students and their families, impacting its generalizability. This challenge to generalizability will impact how this data can serve the districts of study and those throughout Pennsylvania. Second, using an online survey will ask families to interpret the questions as intended without the researcher's ability to provide clarity. Third, this survey will be provided only online and in English, which can lead to the exclusion of parents/families who (a) may not have reliable access to the Internet, (b) may be illiterate, and/or (c) lack English proficiency.

Definition of Terms

The following terms are used in this dissertation. Understanding these terms within the context of this study is important. Terms and their definitions are as follows:

Building Blocks of Collaboration: The foundation for collaboration is established when teams focus on relationship building, shared values, and active engagement. The path to collaboration may not always be linear, as progress cannot be made unless the previous building blocks are well established (Griffiths et al., 2021).

Collaboration: Shared responsibility and efforts to achieve results (Anderson-Butcher & Ashton, 2004); Consists of five frameworks that work independently or parallel to each other to

address student needs: intraorganizational, interagency, interprofessional, community collaboration, and family-centered (Lawson & Barkdull, 2001).

Dual-Capacity Building Framework for Family-School Partnerships: A model that recognizes the challenges that impede family-school collaboration, such as differing views and beliefs. To overcome these challenges, this model looks to build capacity in families and the school in a) capabilities or skills and knowledge, (b) connections or networks, (c) cognition or shifts in beliefs and values, and (d) confidence or self-efficacy (Mapp & Bergman, 2019).

Every Student Succeeds Act (ESSA): Legislation that requires LEAs to build their capacity to train families and staff on engagement to increase collaboration (The Leadership Conference Education Fund, 2017).

Free and Appropriate Education (FAPE): Special education and related services are provided at public expense, under public supervision and direction, and without charge to meet the student's unique needs (Center for Parent Information and Resources [CPIR], 2017).

Hoover-Dempsey & Sandler Model of Parental Involvement Process: A model that focuses on why and why not families are involved in their child's education, what actions families take when involved, and the role families play in their child's success in school. Recognizing the positive impact parental involvement can have on their child's education, this model helps educators understand the challenges families face, the variety of ways families can be involved, and the direct impacts these actions have on students (Hoover-Dempsey et al., 2005).

Individualized Education Plan (IEP): A written statement for a child with a disability that is developed, reviewed, and revised, at a minimum, yearly (CPIR, 2017).

Individuals with Disabilities Education Act (IDEA): Legislation requires schools to actively involve parents in their students' Individualized Education Plans (IEPs) by engaging them as

equitable team members (Pennsylvania Training and Technical Assistance Network [PATTAN], 2024).

Key Elements of Collaboration: The eight key elements needed to foster collaboration: (a) open communication, (b) trust, (c) mutual respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, and (h) shared decision making (Griffiths et al., 2021).

No Child Left Behind (NCLB): Legislation that mandates collaboration through parental involvement to increase parental knowledge, which, in turn, would increase parental participation (National Council of La Raza [LCLR], 2007).

Parental Engagement: Opportunities provided by schools to partner with families in a two-way working partnership, built upon dialogue that supersedes barriers and assists in creating plans for their student's academic, social, and emotional growth are present (Ferlazzo, 2011; Rineer-Hershey & Mild, 2020).

Parental Involvement: Actions taken by schools to inform families of events, initiatives, and opportunities to get involved but leave minimal opportunities for parental or family participation in their child's education (Rineer-Hershey & Mild, 2020).

Student with a Disability (SWD): A child of school age who meets the criteria as a child with a disability and in need of services (CPIR, 2017).

Special Education: Specially designed instruction is provided at no cost to the parents to meet the needs of a child with a disability (CPIR, 2017).

Sunshine Model of Trusting Family-Professional Partnerships: A model focused on building partnerships between families and school professionals upon trust through equity, respect,

communication, advocacy, and commitment; all must be present to actualize trust (Turnbull & Turnbull, 2021)

Summary

The role of families in students' lives is significant and omnipotent. Students spend most of their lives outside the school's walls with their families, who heavily shape this time. The influence of those with whom students spend the most time is profound, impacting their behaviors, attitudes, learning, and overall development. However, this is not to discount schools' influence on students and families. In an ideal, mutually beneficial relationship, students will bring home the learning and practices from school and figuratively bring their families to the learning environment. Despite the challenges, all stakeholders must actively pursue such a partnership, focused upon collaboration, to improve special education student outcomes in school and post-secondary. A baseline of parental beliefs and perceptions needs to be gathered to initiate and appropriately focus such efforts. In this study, parents will be invited to participate in a survey and interview to gather data to inform and shape future school-based collaborative practices.

Chapter 2 – Literature Review

The purposes of this dissertation are to (a) determine what parents perceive to be the most valuable school-based practices within each domain of collaboration, (b) if there is a connection between demographics and the most valued practices, (c) the rates at which parents experience collaborative practices, and (d) the barriers and facilitators of collaboration that parents experience. This chapter reviews literature and provides the rationale and framework for this study. Included is the history of educational accountability, quantification of the poor in-school performance of SWD and outcomes post-secondary education, definitions of parental engagement and models demonstrating how it is essential to collaboration, and therefore, student outcomes, identification of the barriers on behalf of the parents and those presented by the schools, and provide a framework of collaboration on which to compare current school practices against.

History of Special Education

The United States Department of Education was established over 150 years ago, in 1867, to gather data and information about the nation's schools and teaching (ED, 2024). The data gathered was intended to provide guidance and insight into improving the effectiveness of America's schools. While there was federal oversight, local jurisdictions ultimately controlled educational decisions. These jurisdictions were left to interpret, apply, or ignore this guidance. Unfortunately, this all too often led to discrimination against students based on disability, racial background, and economic status. These practices were evident in the data; these students were not performing at the level of their peers, and this gap continued to widen over time. It was not until the 1960s and 70s that the federal government acknowledged these unjust practices and acted against them by passing proactive laws. In 1975, the Education for All Handicapped

Students (EHA) was enacted, providing more visibility to SWD. This federal law was to guarantee that identified students were to receive a free and appropriate education (FAPE) in the least restrictive environment (LRE) (Rineer-Hershey & Mild, 2020). In 1990, the EHA was reauthorized and renamed the Individuals with Disabilities Act (IDEA), of which additional reauthorizations have since followed. With these reauthorizations, support and rights for SWD have been further emphasized and expanded upon.

State Performance Plans

While federally defined, FAPE is still largely left to the interpretation of the district providing it. The intention behind this law, which was to improve the education of students with disabilities, was apparent, though performance discrepancies remain. The 2004 reauthorization of IDEA recognized the need for additional focus on the education and outcomes of SWD and added the requirement of a State Performance Plan (SPP) for every state. The federally mandated SPP would provide the structure for each state to describe their compliance with IDEA and the outcomes for their SWD (ED, 2022). These indicators provide the basis for each state's reporting on performance and compliance for school-aged students. Current indicators for SWD are as follows:

- **Indicator 1 - graduation rates:** graduated with a regular high school diploma
- **Indicator 2 - dropout rates:** school exits by dropping out
- **Indicator 3 - student participation and performance on statewide assessments:** (a) participation rate, (b) proficiency rate against grade-level academic standards, (c) proficiency rate against alternative grade-level academic standards (not reported due to group size in LEA), (d) gap in proficiency rates for grade-level academic standards between SWD and students without disabilities

- **Indicator 4 - suspension and expulsion rates:** discrepancy rates of suspension/expulsion for SWD greater than 10 days in a school year, discrepancy rates of suspension/expulsion, by race/ethnicity, for SWD greater than 10 days in a school year
- **Indicator 5 - educational placement (LRE):** percentage of students identified as served (a) greater than 80% of the day in the regular class; (b) less than 40% of the day in the regular classroom; (c) in separate, residential or homebound/hospital placements
- **Indicator 8 - school-facilitated parent involvement:** a measure of schools' efforts to engage parents to improve their child's educational outcomes
- **Indicator 9 - disproportionate representation by race/ethnicity:** rates of SWD by race/ethnicity inappropriately identified and receiving special education services
- **Indicator 10 - disproportionate representation by race/ethnicity in disability categories:** rates of SWD by race/ethnicity inappropriately identified under specific disability categories and receiving special education services
- **Indicator 11 - timelines for initial evaluation:** compliance with timelines for initial evaluations
- **Indicator 13 - IEP postsecondary transition goals and services:** compliance with regulatory requirements within the IEP for secondary transition
- **Indicator 14 - postsecondary outcomes:** rates of SWD enrolled in higher education (a) within one year of leaving high school; (b) or competitively employed within one year of leaving high school; (c) or some other postsecondary

education or training program or some other employment within in one year of leaving high school (ED, 2022)

Three, eight, and fourteen will be the most relevant indicators for this study on SWDs' performance and parental collaboration. These provide student participation and performance data on statewide assessments, school-facilitated parent involvement, and post-secondary outcomes for SWD.

Indicator Three

Across all tested areas and grade levels, the state failed to meet the SPP target rate for the participation of children with IEPs in the 2022-2023 SY, as seen in Table 1. A variety of factors can impact student participation. Technology issues can have the most significant impact, as some districts are not equipped to administer computer-based assessments due to a lack of technological equipment and reliable connectivity (Brown, 2016). A lack of accommodations can accompany test administration; students with disabilities, English learners, and those with comorbidities of a disability who are English learners may be unable to access the needed accommodations to participate in the assessments equitably. Voluntary opt-outs account for the remaining non-participatory students. Families may choose to opt their child out of testing due to concerns with scores being unfairly tied to teacher and school accountability, the already large volume of testing required, and challenges to the equity and suitability of the testing for SWD and other target groups (Katanyoutanant, et al., 2021).

Table 1

Indicator 3A - Participation Rate for Children with IEPs in 2022-2023SY

Grade	State Rate	SPP Target Rate	State Met Rate
		ELA	
4	92.7%	95%	No
8	87.5%	95%	No
11	87.2%	95%	No
		Math	
4	93.1%	95%	No
8	87.4%	95%	No
11	85.2%	95%	No

Note. ELA = English Language Arts. SY = school year. Adapted from https://penndata.hbg.psu.edu/Public-Reporting/SEDR-Report-Dashboard. Copyright 2024 by Pennsylvania State Data Center.

Those students participating in state assessments in Pennsylvania receive both a numerical score and a level of performance. The levels of performance are (a) below basic, (b) basic, (c) proficient, and (d) advanced. An advanced level of performance reflects superior performance, proficient is considered satisfactory, basic is demonstrative of marginal performance, and below basic is an inadequate level of performance (ED, 2022). Table 2 provides the percentage of SWD who achieved either the proficient or advanced level on the Pennsylvania System of School Assessment (PSSA) exams in the 2022-2023 school year. The Pennsylvania failed to meet the target rate for all but 11th-grade ELA and 4th-grade math. Extremely concerning is that more than 75% of SWDs across all tested grades and subjects score at basic or below basic levels regarding grade-level academic standards.

Table 2

Indicator 3B - Proficiency Rate for Children with IEPs Against Grade Level Academic Achievement Standards in 2022-2023SY

Grade	State Rate	SPP Target Rate	State Met Rate
		ELA	
4	19.3%	28.8%	No
8	16.1%	21.5%	No
11	23.5%	18.7%	Yes
		Math	
4	19.7%	19.6%	Yes
8	5.0%	10.9%	No
11	8.1%	25.9%	No

Note. ELA = English Language Arts. SY = school year. Adapted from https://penndata.hbg.psu.edu/Public-Reporting/SEDR-Report-Dashboard. Copyright 2024 by Pennsylvania State Data Center.

Indicator 3D provides a percentage point gap in proficiency rates between SWD and all students against grade-level academic achievement standards. Unlike 3A and 3B, a lower percentage is the sought-after result for this indicator; the smaller the percentage rate difference, the closer the rate of SWDs performing at or above proficiency in comparison to all assessed students. The proficiency gap rates for SWD and all students in Pennsylvania did not exceed the SPP target rate on 4th-grade ELA or for the 4th and 11th-grade mathematics assessments. All other grade-level and assessment combinations exceeded the SPP target rates, readily quantifying the rate at which SWD are lagging behind their peers regarding grade-level achievement standards.

Table 3

Indicator 3D – Gap in Proficiency Rates for Children with IEPs and All Students Against Grade Level Academic Achievement Standards in 2022-2023SY

Grade	State Rate	SPP Target Rate	State Met Rate
		ELA	
4	32.2%	30.9%	No
8	36.2%	34.2%	Yes
11	41.5%	32.7%	Yes
		Math	
4	26.3%	20.0%	No
8	20.7%	16.6%	Yes
11	25.8%	39.1%	No

Note. ELA = English Language Arts. SY = school year. Adapted from https://penndata.hbg.psu.edu/Public-Reporting/SEDR-Report-Dashboard. Copyright 2024 by Pennsylvania State Data Center.

Based on indicator 3D alone, it is apparent that there is a need for increased accountability in special education program delivery focused on closing these performance gaps. Just as problematic is the underperformance of SWD, reflected in indicator 3B, regarding their learning outcomes in general education subjects, which provides the foundation for post-secondary education (Rothstein & Johnson, 2019). One of the main focuses of post-secondary life for SWD is gainful employment. This goal has remained constant over time, but the required training and education for employment have not. In 1959, only 20% of jobs required a minimum of a college degree (Carnevale & Fry, 2000). Fast-forward to 2021, when post-secondary education was required for 68% of jobs, with an estimated 72% requiring the same by 2031, of

which 42% will require a minimum of a bachelor's (Newton, 2023). Being unable to access the general education curriculum successfully limits a student's ability to access post-secondary education, which is essential to gainful employment that funds all aspects of adult life (Carnevale & Fry, 2000).

Indicator 14

Pennsylvania exceeded the SPP target rate for all three post-school outcomes, one-year post-high school graduation, as seen in Table 4. Meeting and exceeding these target rates are a reason for celebration, though it can be argued that they are not ambitious enough. Compared to their general education peers, performance gaps remain eight years post-high school graduation. As Newman et al. (2011) reported, 67% of general education students were enrolled in post-secondary education compared to 60% of SWD. Of these post-secondary programs, 40% of general education students were enrolled in a 4-year university, compared to only 19% of SWD. Completion rates of these 4-year programs also differ based on disability status, with only 34% of SWD completing their program as opposed to 51% of general education students. Impacted by post-secondary education is the rate of pay, of which SWD averages a dollar less than an hour compared to their peers. Lower rates of independent living (45% vs. 59%) also define SWD post-secondary (Newman et al., 2011).

Table 4

Indicator 14 – Post-School Outcomes 2015-2016SY

Target	State Rate	SPP Target Rate	State Met Rate
a	28.84%	26.40%	Yes
b	67.32%	60.80%	Yes
c	73.34%	68.80%	Yes

Note. Adapted from https://penndata.hbg.psu.edu/Public-Reporting/SEDR-Report-Dashboard. Copyright 2017 by Pennsylvania State Data Center.

Collaboration Between Stakeholders

SWDs' poor performance on standardized testing reflects their access to and comprehension of the general education curriculum. Gains must be made in these areas to maximize achievement and achieve goals to improve in-school and post-school outcomes (Sujarwo & Herwin, 2023). Collaboration between stakeholders involved with SWDs is a proven approach to these challenges and achieving such goals (Anderson-Butcher & Ashton, 2004; Daaboul, 2022). Collaboration is based on the understanding that "no agency or professional can succeed alone in addressing the multifaceted needs of students and their families" (Anderson-Butcher & Ashton, 2004, p. 40); there is an interdependence among all stakeholders who serve students with disabilities. A student's success depends upon collaboration between teachers, social workers, counselors, nurses, paraprofessionals, local service providers, community members, parents, and families (Anderson-Butcher & Ashton, 2004). From an overarching perspective, collaboration can be defined as two or more stakeholders working together and sharing responsibilities to achieve a common goal(s) (Cowan et al., 2004; Gardner, 1999; Lawson & Barkdull, 1999). While not explicitly stated within the definition, it is inherent to collaboration that all involved "pool their resources to create a cooperative, interdependent

relationship" (Cowan et al., 2004, p. 201) as part of a dynamic and reciprocal process (Cowan et al., 2004). A simple example of collaboration is when parents provide insight into their student's strengths and limitations in non-school settings, and teachers provide the same regarding the school setting. Though such an example must be noted, it is an oversimplification of collaboration.

When schools and families collaborate, the benefits for students are plentiful. Table 5 highlights how collaborative teams can help students improve in needed areas and reduce problematic behaviors.

Table 5

Benefits of Collaborative Teams

Improvements in:	Reductions in:
• Academic achievement • Quality of work • Classwork completion • Homework completion • Attitudes toward school • Teacher-student relationships • Social competence • Attendance • Peer relationships • Post-secondary outcomes	• Internalization of problem behaviors • Externalization of problem behaviors • Discipline referrals • Dropout rates • In-grade retention • Truancy

Note. From Blair et al., 2011; Christenson, 2005; Cox, 2005; Epstein, 2001; Esler et al., 2008; National Association of School Psychologists [NASP], 2012; Serpell & Mashburn, 2011.

Recognizing the positive impacts of collaboration between stakeholders for SWD, it has been formalized into policies and legislation (ESSA, 2015; IDEA, 2004; NCLB, 2001). Below are the policies and legislations of the No Child Left Behind (NCLB), the Individuals with Disabilities Education Act (IDEA), and The Every Student Succeeds Act (ESSA), all of which mandate collaboration.

No Child Left Behind (NCLB)

NCLB (2001) mandated collaboration through parental involvement to increase parental knowledge, which, in turn, would grow the rates of parental participation. Requirements were set for schools "to hold meetings with parents to inform them of general federal education requirements and parent rights; notify[ing] parents if their child's school has been identified for school improvement; and notify[ing] parents of their right to request information regarding their child's teacher (LCLR, 2007).

Individuals with Disabilities Education Act (IDEA)

IDEA (2004) requires schools to recruit parents to actively participate in meetings and collaborate regarding their students' educational programming. The law outlines explicitly that schools must do the following to involve parents: (a) provide parents with prior notice of a meeting regarding their child, (b) allow parents the opportunity to agree on a date and time for the meeting, (c) provide a means to include parents if they are unable to attend the meeting (Cowan et al., 2004). Parents must also be involved by providing input for evaluations to determine eligibility. Once identified as needing services, parent involvement is required for IEP decision-making, including accommodations and placement. In addition, parent consent is required for reevaluation, and parents are notified of their student's progress and can request

educational programming changes (Cowan et al., 2004). IDEA champions parents as essential members of a team who work collaboratively to meet their students' needs (PATTAN, 2024). Through IDEA, schools must actively involve parents in their students' Individualized Education Plans (IEPs) by making them equitable team members (PATTAN, 2024).

Every Student Succeeds Act (ESSA)

ESSA (2015) is focused on "the meaningful inclusion of the parents and communities that represent students who are low-income, English learners, Native Americans, immigrants, or who have a disability" (The Leadership Conference Education Fund, 2016, p. 5). This is done by requiring LEAs to build their capacity to train families and staff on engagement to increase collaboration. Such topics for parents cover training on state academic standards, assessments, progress monitoring, and working with their children at home, in addition to other training deemed appropriate and needed. Similarly, staff training would be based on need, and others focused on educating school staff on how to engage parents as equal partners, engage diverse families in written and spoken form, and provide support when requested (The Leadership Conference Education Fund, 2016).

Indicator 8

To measure the degree to which LEAs implement the law with fidelity, specifically outlined through IDEA, parents are surveyed as part of Indicator 8 of the SPP, school-facilitated parent involvement**.** The data reported from this survey serves as a measure of schools' efforts to engage parents to improve their child's educational outcomes. In Pennsylvania, the Department of Education utilizes a large-scale survey in one-fifth of its districts yearly (ED, 2022). The twenty-five-question survey developed by the National Center for Special Education Accountability Monitoring (NCSEAM) (n.d.) provides a percentage of parents who report their

LEA encouraged their involvement to improve services and outcomes for their identified student (Lammert & Bitterman, 2018). The survey is distributed to a sample representative of parents of special education students across the state based on disability category and demographics with an over-sampling of parents of Black or African American and Hispanic students. This over-sampling is done to compensate for historically lower response rates from these groups (Lammert & Bitterman, 2018). It is considered representative if the response rate is within 5% of the state percentage for the reported categories of race/ethnicity and disability. In 2022, PDE reported an under-representation of parents of students with specific learning disabilities and those of Black or African American students (Lammert & Bitterman, 2018). Not only do the response rates impact the state sampling confidence, but the greater the number of responses received from individual LEAs, the higher the rate of confidence that the sample is representative of that population (Lammert & Bitterman, 2018). The state of Pennsylvania, in the 2014-2015 school year, fell below the state rate and did not meet the target rate, as seen in Table 6. In addition, these results are reported with low confidence as genuinely representative of the state's demographics (Pennsylvania State Data Center, 2017).

Table 6

Indicator 8 – School-Facilitated Parent Involvement

Confidence Interval	State Rate	SPP Target Rate	State Met Rate
40.03-45.41%	44%	46.4%	No

Note. 95% is the desired level of confidence. Adapted from https://penndata.hbg.psu.edu/Public-Reporting/SEDR-Report-Dashboard

Barriers to Participation

Reflecting upon these poor rates, regarding LEAs' efforts to involve parents of special education students and the confidence with which they are reported due to insufficient participation, it can be assumed that there are additional barriers that need to be considered when looking to build collaborative teams with parents as key members. Even with guidance from research-based frameworks and models, barriers to collaborative teaming with parents will remain. It is essential to recognize these barriers, which present themselves on both the familial side of the team and the school side.

Parental Barriers

Outside the familial realm of control are socioeconomic status, categorization as part of migrant and minority groups, and single parent. Being categorized as part of any of the groups is closely correlated with minimal to no collaborative efforts regarding schooling for their child(ren) (Manzon et al., 2015). These challenges can also be viewed through the lens of capital, specifically economic, cultural, and social capital (Bourdieu, 1986). Families with high levels of economic capital need not be concerned with financial resources and assets (Bourdieu, 1986), and those rich in cultural and social capital experience greater access to educational opportunities. Opportunities that increase in value for those students identified with disabilities (Murray et al., 2020; Trainor, 2010). A family that is identified as having high social and cultural capital will access resources independently to develop a deeper understanding of processes and procedures and will seek assistance from their surrounding community (Trainor, 2010). This can sometimes lead to the 'hoarding' of opportunities when efforts are not made to bridge the gaps in the capital (Murry et al., 2020)—making the same opportunities less accessible to those with limited social and cultural capital. However, when schools try to bridge these gaps, there is

greater potential to generate more equitable outcomes for all students (Murry et al., 2020). Those students experiencing the comorbidity of less capital and a disability are more likely to experience struggles with accessing and benefiting from their education. However, increased collaboration with families can transcend these deficits regardless of their capital (Burke, 2013).

Additional barriers to engagement occur due to a multitude of other factors. For some parents, this can be due to (a) work or home-school scheduling conflicts, (b) arduous parental educational history, (c) previous encounters at their child's school impacting respect held for educators, (d) beliefs about disability, (e) lack of transportation, (f) lack of child care, (g) limited parental education, specifically regarding literacy skills, and, therefore, (h) low sense of efficacy, (i) unmet basic needs in the home, and (j) communication and language barriers (Cowan et al., 2004; Goodall, 2017; Kalyanpur et al., 2000). Also, playing a part in limited collaborative efforts on behalf of parents is a long-held perception that teachers are experts whose opinions are not to be challenged or opposed (Harry et al., 1995). Further exacerbating some of these parental barriers are those actions taken by schools.

School Barriers

Schools, without being aware of the impact of their practices, can regularly engage in behaviors that maintain barriers to collaboration with parents. Actions taken by school personnel can be due to a lack of knowledge and experience and, in turn, a low sense of self-efficacy on how to best collaborate with parents of varying backgrounds (Christenson, 2003; Epstein & Dauber, 1991; Hoover-Dempsey & Sandler, 1997). Due to their limited skill set or the belief that they, as professionals, do not require familial support or that it will not prove beneficial, parental collaboration is not sought or is done so with minimal effort. Suppose communication occurs between the school and parents. In that case, it may (a) not take place at times convenient to

allow for full parental participation, (b) be done in a language in which the parents are not fluent or literate, and (c) only convey problems their child is having in school (Christenson, 2003; Epstein & Dauber, 1991; Hoover-Dempsey & Sandler, 1997).

These barriers persist and are exacerbated by additional actions taken by schools when collaboration is mandated and essential to the success of students with disabilities, such as the IEP meeting. Collaborative efforts on behalf of the school are quickly undone when IEP meetings involve excessive paperwork, failure to involve parents in discussions, overuse of jargon, and confusing procedures (Mueller & Vick, 2017). Even the document, known as the procedural safeguards, provided to all families when their student is initially found eligible for special education services, and at a minimum once a year while they still qualify, are written at an average of the 16th-grade level (Mandic et al., 2012). Without being able to comprehend or adequately access their rights as parents of a student with a disability due to language and literacy-related challenges, parental abilities to collaborate with the school team will continue to be compromised (Mandic et al., 2012).

Involvement vs. Engagement

Recognizing the barriers is not enough to overcome their impact. Strategies to improve parental engagement can be implemented by understanding these barriers and seeking parental engagement, not just involvement. While there is value in both approaches with families, engagement is most conducive to collaboration. Involvement informs families through one-way communications through website announcements, district- or school-wide pre-recorded phone messages, and newsletters (Ferlazzo, 2011). The expected outcome of parental involvement is to inform families of school events, initiatives, and opportunities to get involved (Rineer-Hershey & Mild, 2020). While still valued, involvement leaves minimal opportunities for parental or family

participation in their child's education (Rineer-Hershey & Mild, 2020). When schools employ efforts to increase engagement, opportunities to partner with families and assist in creating plans for their student's academic, social, and emotional growth are present (Ferlazzo & Hammond, 2009). A defining factor in engagement is two-way working partnerships built upon ongoing dialogue that supersedes many of the barriers (Rineer-Hershey & Mild, 2020).

Engagement and Collaboration Models

Engagement and collaboration models can help LEAs plan and implement their approaches. They must reflect on the context of each family and help them meet their student's educational and developmental needs to increase engagement and improve student outcomes (Rineer-Hershey & Mild, 2020). Three such collaboration models include the Dual-Capacity Building Framework for Family-School Partnerships (Mapp & Bergman, 2019), the Hoover-Dempsey & Sandler Model of Parental Involvement Process (Hoover-Dempsey et al., 2005), and the Sunshine Model of Trusting Family-Professional Partnerships (Turnbull & Turnbull, 2021).

Dual-Capacity Building Framework

The Dual-Capacity Building Framework for Family-School Partnerships (Mapp & Bergman, 2019) recognizes the different experiences of families and educators and their abilities to impact, even more so when working collaboratively. As this model recognizes, educators and families can often have incompatible views and beliefs, which creates challenges when establishing a family-school partnership. Challenges that impede educators are (a) a lack of exposure to successful family engagement, (b) minimal training on engagement, (c) a belief that partnerships are not essential, and (d) viewing students and families with a deficit mindset (Mapp & Bergman, 2019). For parents, challenges can be due to (a) lack of exposure to strong family engagement, (b) previous negative experiences with schools and teachers, (c) feeling unwelcome

as a member of their child's educational team, and (d) feeling disrespected, unheard and unvalued by the school team (Mapp & Bergman, 2019). This model focuses on building capacity in all stakeholders in capabilities, connections, confidence, and cognition (Mapp & Bergman, 2019). To begin to overcome these challenges, conditions must be optimized for the process and the organization or school team involved. Optimal conditions for the process are (a) built on reciprocal trust, (b) rooted in learning and development, (c) focused on assets, not a lack thereof, (d) responsive and respectful of cultural diversity, (e) collaborative, and (f) interactive (Mapp & Bergman, 2019). Organizationally, conditions are primed when they are (a) systemically embraced, (b) integrated, and (c) sustained (Mapp & Bergman, 2019). When these conditions are in place, the groundwork is laid to help educators and families build upon and grow in their 4C areas: (a) capabilities or skills and knowledge, (b) connections or networks, (c) cognition or shifts in beliefs and values, and (d) confidence or self-efficacy. With increased capacity in these 4 C areas, educators are empowered to welcome, connect, engage, and honor families in various roles in their child's education. Roles include co-creators, supporters, encouragers, monitors, advocates, and models (Mapp & Bergman, 2019). All efforts put forth by both educators and families are to effectively partner to support their child and improve the school.

Hoover-Dempsey & Sandler Model of Parental Involvement Process

The Hoover-Dempsey & Sandler Model of Parental Involvement Process (Hoover-Dempsey et al., 2005) focuses on why and why not families are involved in their child's education, what actions are taken by families when involved, and the role families play in their child's success in school. Recognizing the positive impact parental involvement can have on their child's education, this model helps educators understand the challenges families face, the variety of ways families can be involved, and the direct impacts these actions have on students (Hoover-

Dempsey et al., 2005). Parental entry into school involvement is based upon personal motivators (i.e., beliefs on the role they are to take and their sense of self-efficacy in doing so), perceptions of invitations to be involved (i.e., general, specific teacher, and specific child invitations), and life context variables (i.e., beliefs about their skills and abilities, time and energy which can be allocated, and family culture) (Hoover-Dempsey et al., 2005). These motivators, perceptions, and life variables drive the form in which parents become involved. Involvement can take the form of communication with their child about personal and familial values, goals, expectations, and aspirations. Other forms include involvement in activities at home (e.g., talking about the school day, reviewing work), family-school communication, and participation in school-based activities (Hoover-Dempsey et al., 2005). Parental behaviors, when involved, can be done through encouragement, modeling, reinforcement, and instruction, all of which are essential to school success. However, if students do not recognize and consider their parents' behaviors, they can fail to translate them to achieve academic success. When students do perceive and internalize their parents' behaviors, it can lead to the development of student attributes that are conducive to achievement: (a) academic self-efficacy, (b) an intrinsic motivation to learn, (c) self-regulatory strategy knowledge and use, and (d) social self-efficacy for relating to teachers (Hoover-Dempsey et al., 2005). Parent involvement is vital to all levels of this model and the ultimate goal of improving student outcomes.

Sunshine Model of Trusting Family-Professional Partnerships

The Sunshine Model of Trusting Family-Professional Partnerships (Turnbull & Turnbull, 2021) is built upon a solid family-professional relationship for students with disabilities. This model builds partnerships between families and school professionals upon trust through equity, respect, communication, advocacy, and commitment; all must be present to actualize trust

(Turnbull & Turnbull, 2021). Table 7 provides definitions of each dimension of trust and actions to promote them. When trust is established, families and professionals can engage in shared decision-making, categorized under seven opportunities. These seven opportunities include academic learning, social-emotional learning, behavior assessment, special meetings, transition, and school capacity enhancement. When families and professionals can rely on each other, student outcomes are improved, and students experience a greater sense of belonging and demonstrate more resilience (Turnbull & Turnbull, 2021).

Table 7

Definitions and Actions of Trust Dimensions in Sunshine Model of Trusting Family-Professional Partnerships

Trust Dimension	Definition	Actions
Equity	Providing levels of support determined by needs, concerns, and available resources	-Establish modes of communication early with families -Utilize and connect families with community resources -Recognize and work to eliminate implicit biases
Respect	Demonstrating appreciation for families' qualities, needs, and feelings	-Focus on the strengths of students and families -Lead with empathy -Recognize the impact familial culture can have on education
Communication	Reciprocal, frequent, regular, and culturally responsive interactions	-Engage families with open-ended questions -Acknowledge familial perspectives and feelings -Manage expectations regarding school practices

Table 7 continued

Trust Dimension	Definition	Actions
Advocacy	Actions taken to reach determined outcomes	-Recognize barriers families face outside of school -Recognize barriers the school can present to families -Work with immediate team members and community resources to overcome the identified barriers
Commitment	Prioritization and valuing of the partnerships and their desired outcomes	-Identify goals and their rationales and continually reflect upon their progress -Seek out and take part in professional development to improve outcomes -Continually seek and act upon feedback

Note. Adapted from Turnbull & Turnbull, 2021

Model Limitations

It goes without question that these engagement models are well-intended, but well-intended or not; they tend to reinforce "power inequities between families and schools" and "consolidate dominant institutional authority" (Ishimaru, 2017, p. 4). When viewed through these models, families are to be fixed, not equitable, partners in their child's education. Strategies utilized in these models are, first, intended to build capacity in the parents. This increased capacity will enable them to advocate for their children, ensuring they receive the best services to meet their needs. Positive outcomes can be plentiful, but they are limited to their child and not all children and, therefore, fall short of having any systemic impact (Ishimaru, 2017). Secondly, these models maintain communication as unidirectional, specifically concerning expertise and relational capacity; teachers and schools are the experts and provide the greatest amount for a

student's education (Ishimaru, 2017). Lastly, these models tend to default to conventional engagement strategies. Schools remain the dominant member of the team and maintain control over how, why, and when parents are engaged (Ishimaru, 2017). Such actions are maintained due to a concern over a loss of power "wherein an increase in one individual or group's power entails the loss of control and power on the part of another's" (Ishimaru, 2017, p. 8). An understanding that this relational power is only possible through sacrifices on behalf of team members must be overcome. School teams and parents must reflect upon and recognize that their relationships and interactions can change through new and updated practices (Ishimaru, 2017). Through the dissection of these models, schools can begin to reflect upon their practices and make needed changes or employ new practices to foster more equitable collaboration with all stakeholders.

Collaboration

Framework for Collaboration

The most general definition of collaboration is "working together and sharing responsibility for results" (Anderson-Butcher & Ashton, 2004, p. 40). A lack of specificity or structure regarding achieving collaboration can harm the process and fails to acknowledge its true complexity and the need for professionals and agencies to work together to meet the multifaceted needs of students and their families (Anderson-Butcher & Ashton, 2004). Collaboration, as per the work of Lawson and Barkdull. (2001), is built upon five frameworks that address the multitude of student needs in school. These frameworks are intraorganizational, interagency, interprofessional, community collaboration, and family centered. Through validation of each other's roles (e.g., teachers, social workers, school psychologists), which are most often provided independently of or parallel to each other, and providing insight into successful strategies, intraorganizational collaboration occurs (Anderson-Butcher & Ashton,

2004). Interagency collaboration occurs when organizations, often with different missions, work together for the benefit of others. Such collaboration is vital when a student is experiencing stressors beyond the walls of the school, such as poverty, family conflict, and mental health concerns (Anderson-Butcher & Ashton, 2004). Schools, while becoming more equipped to handle such challenges, still need help, especially for the most vulnerable students. When two or more professionals from differing agencies work to assist a student and his or her family, it is known as interprofessional collaboration (Lawson et al., 1999). Through the development of integrated support systems, the "multiple, co-occurring needs of the family are met" (Anderson-Butcher & Ashton, 2004, p. 43), and students come to school better prepared to learn (Lawson et al., 1999). Community collaboration is when numerous community stakeholders work together to improve student outcomes. Community collaboration occurs when local business owners, older adults, youth, parents, community leaders, city government, religious institutions, and others coordinate. Lastly, family-centered collaboration is when parents are considered experts on their child and treated as such. Families are full-time members of their child's team and have an equal say in the support and services provided (Anderson-Butcher & Ashton, 2004). This approach is rooted in the knowledge that without alignment of services and familial support, there is a greater likelihood of failure to attain the established goals of the collaboration. Through family-centered collaboration, schools can become more effective, and families become empowered to help themselves and more likely to obtain help if needed (Anderson-Butcher & Ashton, 2004).

While each collaboration framework provides value in isolation, their most significant impact occurs when they are embraced as interrelated, and stakeholders benefit from each other's efforts. For example, empowering parents makes them more likely to help their children. Their

children, in turn, will become more engaged in their learning and more likely to speak up with their empowered parents regarding their needs and concerns. When these needs and concerns are voiced, services can be better tailored and more responsive to needs, increasing academic achievement and attendance and improving student behavior (Anderson-Butcher & Ashton, 2004; Lawson,1999).

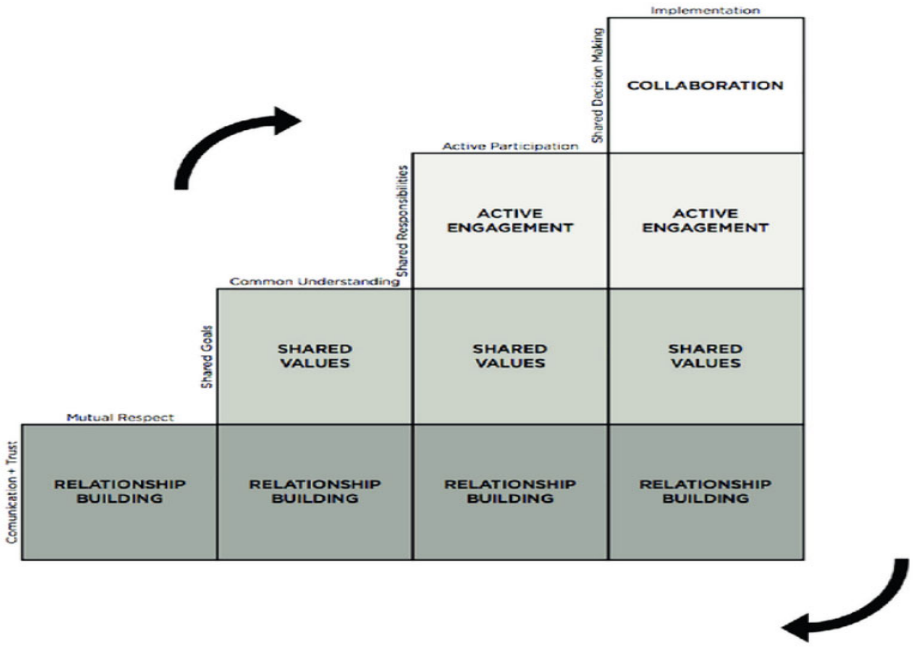
Building Blocks of Collaboration

Recognizing the need for each of these types of collaboration is not enough. The collaboration must also be structured to be effective, and this can occur only when clearly defined. Griffiths et al. (2021) systematically reviewed the literature on collaboration to develop a universal model for schools. This model includes the "foundation for developing a collaborative relationship and the specific elements that help the team to collaborate throughout the process truly" (Griffiths et al., 2021, p. 62). Through their analysis, the researchers were able to identify nine key elements needed to foster collaboration: (a) open communication, (b) trust, (c) mutual respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, (h) shared decision making, and (i) implementation (Griffiths, et al., 2021). Trust, open communication, and mutual respect are requirements of relationship building. Focusing on shared goals and responsibilities rooted in a common understanding provides the means to develop shared values. Active participation based on a sense of shared responsibility fosters active engagement. Implementation can then occur after these other elements are in place with shared decision-making, resulting in the end goal of collaboration. These elements do not develop in isolation but are part of a dynamic process where multiple systems must interact across all stages of the collaborative efforts to allow for the end goal of implementation. It is for this reason that Griffiths et al. (2021) present collaboration as a set of building blocks, see Figure

3, because the foundational blocks must be “developed and cultivated before additional ones can be added” (p. 74). The path to collaboration is also recognized as non-linear; sometimes, teams must return to the foundational blocks before addressing the missing or damaged elements, highlighting another essential aspect of a collaborative team's flexibility and adaptability.

Figure 3

Building Blocks of Collaboration



Relationship Building. The three aspects necessary for successful relationship building are open communication, trust, and mutual respect. Open communication is present when all parties can comfortably and effectively express their ideas, which can minimize conflict and have access to all information to allow for equitable participation (Griffiths et al., 2021). Trust is developed over time and can be attributed to effort and energy focused upon effective communication, and everyone works toward and maintains focus on the common goal. With solid foundations of open communication and trust, members value the knowledge, skills, and competence that others bring to the team. An additional benefit to solidly established

relationships is that these aspects are essential to conflict resolution, which is inevitable in collaborative teams (Griffiths et al., 2021).

Shared Values and Beliefs. Shared goals and common understandings must be present to establish shared values and beliefs. Shared goals are developed when all team members provide input regarding the goal or joint problem that has brought them together. These goals can only be accomplished or remedied with everyone working together. In working together, there must be a common understanding that all members, regardless of their background, experience, knowledge, or skill, are there to achieve the same shared goal.

Active Engagement. The team's shared goals and common understandings build upon the established trust, open communication, and mutual respect. Only once these prerequisite aspects are established can active engagement occur. Active engagement takes place when there is shared responsibility and active participation. By contributing their expertise, team members establish and maintain their role as contributors to the solutions, sharing the responsibility. However, just contributing does not mean there is active engagement. Active engagement occurs when members embrace their role and meaningfully contribute ideas and resources.

Collective Collaborative Effort. Only once the other building blocks of relationship building, shared values and beliefs, and active engagement are established can a team tackle the final step of determining and enacting solutions. The aspects that must be present for this final stage are shared decision-making and implementation. After gathering input from all members, final decisions are made regarding the solutions implemented. The final step involves enacting the decided-upon solutions and ensuring they are implemented with fidelity.

Summary

Positive student outcomes are associated with effective and equitable collaboration, which is vital to equitable educational opportunities (Griffiths et al., 2021). The stage is set for these opportunities when "parents and educators share resources, ideas, decision-making power, and ownership for mutually determined goals regarding both the home and school-based educational curricula" (Cowan et al., 2004, p. 208). These efforts to create and nurture these opportunities require time and patience on behalf of schools and families. When these collaborations are cultivated, "they can result in both meaningful and effective educational and developmental outcomes for children and yield benefits that cannot be achieved when families and schools work in isolation" (Cowan et al., 2004, p. 208). Collaboration is a means for SWD to achieve, close the gaps between them and their general education peers, and lead more fulfilling and productive lives post-secondary. Analyzing strengths and areas of growth for LEAs can provide invaluable information on how to improve and build upon current practices.

This research study aims to inform school-based practices by examining parental perspectives and experiences. Quantitative and qualitative data will be collected through a survey and semi-structured interviews, providing a platform for gaining a deeper understanding of school-based collaborative practices from a parental perspective. Chapter 3 will expand upon the methods and design chosen for this study, outlining why they best address the research questions and goals.

Chapter 3 – Methods

This chapter outlines the methodology used to examine parents' perceptions of school-based collaborative practices in special education. The purpose of this study is to gain insight into how parents value specific collaboration practices, the frequency at which they perceive these practices to occur, and to determine if these perceptions are influenced by parent race/ethnicity, area of disability, and grade level. To capture broader patterns and in-depth experiences, a mixed-methods approach was selected, providing a greater opportunity to gain an understanding of how school-based practices impact parent and school collaboration.

A mixed-methods design is appropriate for this study because the researcher can develop "a more complete understanding of the changes needed for a marginalized group through the combination of qualitative and quantitative data" (Creswell & Creswell, 2018, p.216). For this study, the marginalized group has been identified as school-aged students receiving special education services in a Pennsylvania public school. This mixed-methods study employs a convergent parallel design, where quantitative and qualitative data will be collected simultaneously, analyzed separately, and then merged to compare and determine if the sets of findings confirm or disconfirm each other (Creswell & Creswell, 2018). For this study, a side-by-side comparison approach will be used to merge the data. Utilizing this approach, the quantitative data will be analyzed first, followed by the qualitative data (Creswell & Creswell, 2018). This approach will provide the structure to determine if the themes derived from the interviews align with the data collected through the survey; these instruments are detailed in this chapter.

Participants and Setting

The participants in this mixed-methods study included parents of students receiving special education services in school districts across Pennsylvania. The participants in this study were parents or guardians of special education students in kindergarten through twelfth grade for the 2024-2025 school year, with the authority to make educational decisions for their students receiving services in one of the district schools. Students could be receiving services under any of the disability categories identified and defined by IDEA: (a) intellectual disability, (b) hearing impairment including deafness (district of study combines two categories), (c) speech or language impairment, (d) visual impairment including blindness, (e) emotional disturbance, (f) orthopedic impairment, (g) autism, (f) traumatic brain injury, (g) other health impairment, (h) specific learning disability, (i) deaf-blindness, or (j) multiple disabilities (PATTAN, 2024).

Table 8 presents the percentages of special education students receiving services under each of the IDEA disability categories for the state. Table 10 shows the percentages of students receiving special education services by age.

Table 8

IDEA Disability Categories for State Special Education Enrollment for 22-23SY

	Percentage
Autism	13.2%
Deaf-Blindness	0%
Emotional Disturbance	7.9%
Hearing Impairment, including Deafness	0.8%
Intellectual Disability	6.2%

Table 8 continued

	Percentage
Multiple Disabilities	0.9%
Other Health Impairment	18.2%
Orthopedic Impairment	0.2%
Specific Learning Disability	38.3%
Speech and Language Impairment	13.9%
Traumatic Brain Injury	0.2%
Visual Impairment	0.3%

Note. Pennsylvania State Data Center (2024). *Special education data report: Pennsylvania.* Author.https://penndata.hbg.psu.edu/penndata/documents/BSEReports/Data%20Preview/2023-2024/Speced_Quick_Report_PA_Final_2023-2024.pdf

Table 9

Age Distribution of Students Receiving Special Education Services in Pennsylvania (as of December 1, 2023)

	Percentage
5	2.8%
6	5.4%
7	6.6%
8	7.6%
9	8.4%
10	8.4%
11	8.3%

Table 9 continued

	Percentage
12	8.2%
13	8.2%
14	8.2%
15	8.5%
16	8.3%
17	8%
18	3.7%
19+	1.7%

Note. Ages are calculated based on the student's age as of December 1, 2023, in accordance with federal reporting guidelines. Pennsylvania State Data Center (2024). *Special education data report: Pennsylvania.* Author. https://penndata.hbg.psu.edu/penndata/documents/BSEReports/Data%20Preview/2023-2024/Speced_Quick_Report_PA_Final_2023-2024.pdf

Quantitative Methods

Survey

A survey was designed based on Griffiths et al.'s (2021) work on the building blocks of collaboration. The researcher chose Griffiths et al.'s domains of collaboration as the basis for the survey for the following reasons:

1. **Evidence-Based:** The best practices identified for each domain are supported by comprehensive academic research, giving the results more credibility.
2. **Actionable Data:** The domains provide a structured approach to gathering actionable data; specific areas of weakness can be identified, providing the basis for targeted improvement efforts (Ahmad et al., 2019).

3. **Framework:** The domains provide a standardized framework for gathering and interpreting data regarding collaboration, positively impacting the reliability of the survey when conducted across diverse populations (Ahmad et al., 2019).

This survey would be one of the tools used to collect quantitative data from parents. Survey research was chosen for this study as it provides "a numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell & Creswell, 2018, p. 12) and "precision to qualitative descriptions of phenomena" (Krathwohl & Smith, 2005, p. 164). The survey progresses through three different types of questions: (a) multiple-choice demographic, (b) Likert scale, and (c) choice through the use of Google Forms.

Using a five-point scale, Likert scale questions can quantify the participant's subjectivity to an objective numerical value (Joshi et al., 2015). Joshi et al. (2015) view attitudes, perceptions, and opinions as subjective attributes that quantification can transform. For this survey to quantify parental perception of current collaborative practices, a five-point scale ranging from "never" to "always" was used. To determine if demographics influence perceptions, information was obtained through multiple-choice questions adapted from Hughes et al. (2022) to ensure the use of current and inclusive questions and response options. Demographic questions will ask participants to indicate their students' age as of December 1, 2024, the IDEA category under which their student received special education services, and the parents' ethnicity/race. The survey, delivered electronically, consisted of a consent form, nine choice questions, nine Likert-scale questions, and four multiple-choice demographic questions, and will require approximately 10 minutes of the participant's time.

Quantitative Data Analysis

Table 10 outlines the planned analysis for quantitative data.

Table 10

Quantitative Data Analysis Plans

Quantitative Question	Data Analysis	Rationale
What do parents believe to be the most valuable school-based practice in each of the domains of collaboration (i.e., open communication, trust, mutual respect, shared goals, common understanding, shared responsibility, active participation, shared decision making, and implementation)?	a. Report out as frequency counts and percentages (descriptive) b. Chi-square goodness of fit test (inferential) i. H0: Parents are equally likely to choose any of the school-based practices within each domain. ii. H1: Parents are more likely to value certain school-based practices over others within each domain.	a. Summarize frequencies to determine which practice is chosen most in each domain b. Determine if the parents' preferences for practices differ from an equal distribution.
Is there a relationship between demographics (i.e., parent's race/ethnicity, student's age, and student's disability category) and what parents deem the most valuable school-	a. Report out as frequency counts for each demographic category (i.e., (a) parent's race/ethnicity, (b) student's age, and (c) student's disability category) and the most valued practice in each of the domains of collaboration (i.e., open communication, trust, mutual respect, shared goals, common understanding, shared responsibility, active participation, shared decision making, and implementation) (descriptive)	a. Summarize frequencies to determine which practice is chosen for each demographic vs. domain b. Determine if preferences differ by subgroup within each demographic category

based collaborative practice?	b. Chi-square test of independence (inferential) i. H0: There is no relationship between student demographics and parents' perceptions of the most valuable school-based collaborative practice in each domain. ii. H1: There is a statistically significant relationship between demographics and what parents deem the most valuable school-based collaborative practice in each domain.	
How often do parents experience the practices of each collaboration domain when engaging with the school district regarding their student's special education services?	a. Report out as frequency counts and percentages (descriptive) b. Report the means and standard deviations for each practice within each domain (descriptive)	a. Summarize the frequencies at which parents report experiencing a particular practice b. Summarize the average frequencies parents report experiencing each practice within a domain, providing data to determine what the typical experience is of parents (mean) b. Determine if parent responses for each practice are consistent or divided (standard deviation)

To conduct Chi-square tests with the collected data and ensure the reliability of the tests, the expected frequencies for the subgroup sampling should be five or greater (Gravetter & Wallnau, 2017). If a cell count falls below this threshold, test reliability decreases, and there is a potential for increased Type I error rates when the null hypothesis is rejected when it is true (Gravetter & Wallnau, 2017). To ensure the sample size encompasses the smallest subgroup across all demographic categories, 0.2% (Orthopedic Impairment) was used to calculate the minimum responses needed to achieve a cell count threshold of five, resulting in a required sample size of 2,500 responses. Based on the limited permissions granted by school districts to conduct the study, a response rate of 2,500 is higher than what the researcher expects; therefore, adjustments to how data will be grouped for analysis will be as outlined in Table 11.

Table 11

Subgroup Categories and Minimum Sample Size Requirements for Chi-Square Testing

Variable	Subgroup Categories	Minimum Sample Size
Disability Category	*Low Incidence*: Deaf-Blindness, Hearing Impairment (including Deafness), Visual Impairment (including Blindness), Orthopedic Impairment, Traumatic Brain Injury, Multiple Disabilities, Intellectual Disability High Incidence: Autism, Specific Learning Disability, Other Health Impairment, Speech/Language Impairment, Emotional Disturbance	59

Table 11 continued

Variable	Subgroup Categories	Minimum Sample Size
Race/Ethnicity	*White* *Black* *Hispanic* *Other* (Multi-racial, Asian, Pacific Islander, American Indian)	63*
Student Age	*Elementary School*: Ages 5-10 *Middle School*: Ages 11-14 *High School & Transition*: Ages 15-19+	17

* The required sample size for survey responses is 63, which encompasses the minimum sample sizes needed for the other demographic categories.

Validity

In addition to the use of an evidence-based survey, based on the work of Griffiths et al. (2021), validity was also checked through a pilot study. A pilot study group was selected: two special education supervisors, one school psychologist, and one school social worker. This group assessed the survey and provided feedback to the researcher. Based on feedback received, revisions were made to the survey.

If, after data collection, the minimum thresholds of five are met for the above subgroups, a chi-square goodness of fit test will be run to determine if the sample is proportionally representative of the subgroups of (a) Low Incidence and High Incidence, (b) White, Black, Hispanic, and Other Race/Ethnicity, and (c) Elementary School, Middle School, and High School and Transition. Such a measure of representativeness will determine the validity of the study's actual sampling (Gravetter & Wallnau, 2017).

Reliability

The internal consistency of the Likert-type survey questions, as measured by Cronbach's alpha, will be calculated following data collection. A Cronbach's alpha score will quantify the degree to which the sets of statements for each domain of collaboration align, or, as Creswell and Creswell (2018) state, how the instrument scale items "behave in the same way" (p. 154). Cronbach's alpha yields a score between 0 and 1, with the most desirable values falling between .7 and .9 (Creswell & Creswell, 2018).

Qualitative Methods

Interview

At the end of the survey, participants will be asked if they would be willing to participate in a voluntary interview to further elaborate on the Likert scale scores they provided and to identify barriers and facilitators in each domain of collaboration. Through conducting these interviews, the researcher seeks to "enter into the other person's perspective" (Patton, 2015, p. 426) and make that perspective accessible and explicit to others as it can inform and shape practices. The chosen structure for the interviews was a standardized open-ended interview over the phone or through a virtual platform. This structure ensures that the questions and their sequence are predetermined and entirely open-ended, allowing for their inspection by the institutional review board. As a result, a high level of focus is maintained, allowing for efficient time use, and responses are easy to compare (Patton, 2015).

Qualitative Data Analysis

Table 12 outlines the planned analysis for qualitative data.

Table 12

Qualitative Analysis Plans

Qualitative Question	Data Analysis	Rationale
What barriers and facilitators of parental collaboration exist for parents of school-aged students receiving special education services, in each of the domains of collaboration (i.e., open communication, trust, mutual respect, shared goals, common understanding, shared responsibility, active participation, shared decision making, and implementation)?	a. Interviews will be audio-recorded and transcribed verbatim b. Thematic analysis will take place in the following steps: 1. Open coding to identify barriers and facilitators 2. Axial coding to organize codes into higher-level themes 3. Categorize themes according to the domains of collaboration c. Compare responses across participants to identify patterns and differences in experiences	a. Ensure accurate documentation of the participants' responses b. Identify recurring concepts related to collaboration and organize qualitative findings in alignment with the study's domains b. Provide insight into what helps or hinders collaboration according to parents

Note. Data collected from interviews will be analyzed using thematic analysis procedures outlined by Creswell and Creswell (2018).

Validity

Creswell and Creswell (2018) state that the qualitative validity of a study can be determined through the application of specified procedures. Through these procedures, it is determined if the findings of the study "are accurate from the standpoint of the researcher, the

participant, or readers of the account (Creswell & Creswell, 2018, p. 199). To determine the validity of the data collected for this study, the following procedures will be utilized: (a) audio recordings and verbatim transcription of interviews to capture data accurately, (b) member checking through the sharing of summarized data and themes derived from the interview with the interviewee, and (c) peer debriefing by having an additional person review the qualitative data collected and ask questions to ensure interpretation went beyond that of the researcher's perspective (Creswell & Creswell, 2018).

Reliability

Reliability of qualitative studies can be established through consistent procedural approaches (Creswell & Creswell, 2018). For this study, the following will be used to maintain the reliability of the data collected: (a) use of a consistent coding process (i.e., open coding followed by axial coding) across all interview data collected, allowing for replication by other researchers, (b) review of transcripts to check for obvious errors which may have occurred during transcription, and (c) conducting interviews across multiple participants adhering to a standard interview protocol where the same questions will be asked across all participants, consistently (Creswell & Creswell, 2018). The standard interview protocol, as established by Creswell and Creswell (2018), is outlined as follows:

1. Basic information about the interview: Prior to the start of the interview, the interviewer will record basic information for organizational purposes.
2. Introduction: Introduce the interviewer, state the purpose of the study and the structure of the interview, address any questions, and define terms that will be used.
3. Opening question: Begin with an icebreaker question, preferably one that allows the interviewee to talk about themselves.

4. Content Questions: Questions known as the “research sub-questions of the study” (p. 191)
5. Using Probes: When elaboration of an interviewee's response is needed to obtain additional, valuable information.
6. Closing Instructions: Thank the interviewee for their time and assure them of the confidentiality of the interview

Integration Methods

Following the design of a convergent mixed methods study, the quantitative and qualitative data will be collected separately and integrated during the integration phase. Through the survey, quantitative data will be collected to quantify parents' perceptions of current collaborative practices and provide insight into the value parents place on certain school-based practices and the frequency with which they experience them. Interviews will provide the means to collect qualitative data on the perceived barriers and facilitators that impact parents’ collaborative experiences.

Integration will be achieved through side-by-side comparisons to align the quantitative data regarding parents' experiences with the themes and patterns identified in the collected qualitative data. Specifically, the data will be organized based on the nine domains of collaboration (i.e., open communication, trust, mutual respect, shared goals, common understanding, shared responsibility, active participation, shared decision making, and implementation), providing a structure in which to align all data collected regarding collaborative practices in special education. This integrative approach is known as methodological triangulation, which provides additional credibility and validity to the study

through the comparison and corroboration of data from multiple sources (Creswell & Creswell, 2018).

Procedures

Permissions and Preliminary

Prior to initiating data collection, superintendents from all school districts in the state of Pennsylvania, except those in the cities of Philadelphia and Pittsburgh, will be contacted with a request to participate in the study. A letter explaining the study (Appendix A) will be emailed to each superintendent, explaining the purpose and scope of the research. Linked to the letter is a form (Appendix B) to be completed, which informs the researcher of the participant's decision regarding participation in the study. Upon receiving district-level approval, documentation will be submitted to the Institutional Review Board (IRB) at Slippery Rock University.

Survey

Following IRB approval (Appendix C), the researcher will contact the designated liaison for each school district to distribute the survey. The liaison will be provided with the email (Appendix D), including an introductory letter and a link to the survey, to send to the identified population.

The survey will include a digital consent form (Appendix E) as the first screen. Those participants who select “Yes” will be granted access to the full survey, and those who select “No” will be exited from the form. The estimated completion time for the survey (Appendix F) will be approximately 10 minutes. The survey will remain open for five weeks beginning in XX 2025. If the anticipated sample size is not met during that window, the district liaisons will be asked to send a reminder email to the identified parent population. At the end of the survey,

participants will be invited to volunteer for a follow-up interview. Those who express interest will be directed to a separate form where they can provide contact information.

Interview

Parents who indicated interest in being interviewed will be contacted via email or text message to arrange a mutually convenient time and means (e.g., Zoom, Google Meet, or phone). Before any interview takes place, a digital consent (Appendix G) form will be emailed to each participant. This form will remind participants of the interview's purpose, confidentiality measures, potential risks, and their rights, specifically the right to withdraw at any time.

Interviews (Appendix H) will be conducted using a standardized interview protocol and are expected to last around 15 minutes. With the participant's consent, the interviews will be audio-recorded and transcribed verbatim. Throughout the interview process, participants will be assured that all identifying information will be kept confidential and that data will be reported anonymously in the final study.

Efforts will be made to recruit a diverse and representative parent sample from across the state of Pennsylvania; however, limitations are anticipated. These limitations will be addressed in Chapter Five.

Summary

As outlined in this chapter, the methodology that will be used to examine parents' perceptions of school-based collaborative practices in special education will be a mixed-methods design. This study intends to gain insight into how parents value specific collaborative practices, how frequently they perceive experiencing them, and whether these perceptions vary based on parent race/ethnicity, disability, and age. This design is well-suited to provide a deeper understanding of the factors that influence parent-school collaboration and how they may be

experienced across families from diverse backgrounds. The findings from this mixed-methods study will be presented and analyzed in the following chapters.

Chapter 4 – Results

Overview

The purpose of this convergent parallel design mixed-methods study was to explore parental perceptions of school-based collaborative practices used for their school-aged students receiving special education services. Specifically, this study examined the value that parents place on specific collaborative practices, whether perceptions may vary based on parental race, student disability, or student age, as well as the frequency with which parents experience these practices. This study also aimed to identify the facilitators and barriers to collaboration between parents and schools.

This chapter describes the data collected through the web-based survey and virtual interviews. Data will be organized and presented in seven sections. Sections one through five will present the quantitative results, while the qualitative results will be presented in the remaining sections.

Section one will provide demographic data regarding the parents/guardians who completed the survey and the students they answered about. To determine if the distribution of respondents in these demographic categories differed from what would be expected, chi-square goodness-of-fit analyses were conducted. These analyses help establish whether the sample is representative of the broader population of school-aged students receiving special education services.

Section two will present the reliability of the survey scales. Cronbach's alpha (α) was calculated for each domain of collaboration. This test provides insight into the internal consistency of the survey by providing a numerical representation of how closely related the practices for each domain are.

Section three will describe the responses to the questions regarding parents' most valued school-based practice for each of the domains of collaboration. This section will help answer research question 1:What do parents believe to be the most valuable school-based practice in each of the domains of collaboration (i.e., (a) open communication, (b) trust, (c) mutual respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, and (h) shared decision making)? To determine if the distribution of responses differed from an equal distribution, chi-square goodness-of-fit analyses were conducted.

Section four will present the relationship between demographics and the parents' most valued school-based practice for each of the domains of collaboration. This section will help answer research question 2: Is there a relationship between demographics (i.e., (a) parents' race/ethnicity, (b) student's previous grade level, and (c) student's disability category) and what parents deem the most valuable school-based collaborative practice? Chi-square tests of independence were conducted to determine whether the selection of specific practices differed significantly across demographic groups.

Section five will present the rates at which parents experience the practices of each collaboration domain when engaging with their school district. This section will help answer research question 3: How often do parents experience the practices of each collaboration domain when engaging with the school district regarding their student's special education services? Means and standard deviation are reported for each domain to summarize the average frequency of experiences and the variability in parents' responses.

Section six will provide the demographic data regarding the parents/guardians who participated in the voluntary interviews.

Section seven will summarize the interviews regarding the facilitators and barriers to collaboration. Thematic analysis, which involves open coding followed by axial coding, will be used to organize the data into themes based on the domains of collaboration. This section will help answer research question 4: What barriers and facilitators of parental collaboration exist for parents of school-aged students receiving special education services, in each of the domains of collaboration?

Qualitative Results

Demographics

A single administration of the web-based survey was emailed to the designated district liaison for the nine districts that gave consent for distribution. Survey responses were received from 162 participants, of whom 160 completed the survey in its entirety. Table 13 presents the parental race/ethnicity data for respondents. Table 14 presents the ages of the respondents' students as of December 1, 2024. Table 15 presents the disability category under which the respondents' students were receiving special education services.

Table 13

Frequency Distribution of the Parental Race/Ethnicity

	N	%
White	122	76.3
Black or African American	9	5.6
Hispanic or Latino	16	10
Other (Multi-racial, Asian, Pacific Islander, American Indian)	8	5
Prefer not to answer	5	3.1
Total	160	100

Varying across the sample were the number of survey participants within each racial and ethnic category. To allow for meaningful statistical analysis, categories with fewer than five participants were combined. Even after collapsing, response counts ranged from 8 to 122. Survey data were analyzed based on the responses provided to each question. As shown in Table 13, the largest proportion of responses came from participants who identified as white.

Table 14 presents the observed and expected frequencies for the ages of students on December 1, 2024. Those students aged 5 through 10 were classified as elementary school students, those aged 11-14 were classified as middle school students, and those aged 15-19+ were classified as high school and transition-age students. The largest number of survey responses came from parents of elementary school students.

Table 14

Observed Frequencies and Percentages and Expected Frequencies Distribution of Student Age as of December 1, 2024

	Observed Frequency	Percentage	Expected Frequency
Elementary School: Ages 5-10	102	63.8	62.5
Middle School: Ages 11-14	40	25	52.4
High School & Transition: Ages 15-19+	18	11.2	48.1
Total	160	100	163

A chi-square goodness-of-fit test was performed to evaluate whether the distribution of student ages during the 24-25SY followed that of the school-aged special education population of Pennsylvania. The null hypothesis (H_0) stated that the distribution would match that of the state of Pennsylvania. A significance threshold of $p < 0.05$ was used for all tests. The distribution

of the age of students during the 24-25SY was significantly different from that of the school-aged special education population in Pennsylvania, $(x^2(2), N = 160) = 47.65, p =< .001$. Specifically, elementary-aged students were largely overrepresented while those in middle school and beyond were underrepresented relative to state data, rejecting the null hypothesis. These differences should be considered when interpreting the findings and assessing their generalizability to the broader population.

Table 15 presents the observed and expected frequencies for student disability categories provided by survey participants. The largest number of survey responses came from parents of students classified as having a high-incidence disability, accounting for 75.6% of the responses. Of the 160 survey participants, 7 reported their student's disability as unknown.

Table 15

Observed Frequencies and Percentages and Expected Frequencies for Student Disability Categories

	Observed Frequency	Percentage	Expected Frequency
Low Incidence	32	20%	13
High Incidence	121	75.6%	140
Total (analytic sample)	153	95.6%	153
Unknown	7	4.4%	--
Grand Total	160	100%	--

Note. "Low incidence" = Deaf-Blindness, Hearing Impairment (including Deafness), Visual Impairment (including Blindness), Orthopedic Impairment, Traumatic Brain Injury, Multiple Disabilities, Intellectual Disability; "High incidence" = Autism, Specific Learning Disability, Other Health Impairment, Speech/Language Impairment, Emotional Disturbance. Some participants responded 'unknown' to their students' disability category; therefore, the chi-square

analysis was conducted on 95.6% of the participants who provided a complete response. The missing data were identified as randomly missing.

A chi-square goodness-of-fit test was performed to determine whether the distribution of student disability categories matched that of the school-aged special education population in Pennsylvania. The null hypothesis (H_0) stated that the distribution would match that of the state of Pennsylvania. A significance threshold of $p < 0.05$ was used for all tests. The distribution of the student disability categories was significantly different from that of the school-aged special education population in Pennsylvania, $(x^2(1), N = 153) = 30.32, p =< .001$, rejecting the null hypothesis. Specifically, students with high-incidence disabilities were underrepresented, and those with low-incidence disabilities were overrepresented relative to state data. These differences should be considered when interpreting the findings and assessing their generalizability to the broader population.

Survey Reliability

Table 16 presents the internal consistency of each collaboration domain as measured by Cronbach's Alpha. The analysis included all 160 survey participants who completed the items for each domain. Cronbach's alpha coefficients ranged from .895 to .950, indicating high internal consistency for all measures.

Table 16

Cronbach's Alphas for Collaboration Domains

Domain	*N*	Items	Cronbach's α
Open Communication	160	4	.931
Trust	160	5	.950
Mutual Respect	160	5	.895
Shared Goals	160	3	.934
Common Understanding	160	4	.949
Shared Responsibility	160	3	.930
Active Participation	160	3	.934
Shared Decision-Making	160	3	.899
Implementation	160	4	.944

These results suggest that the practices within each domain, as measured by reliability, are focused on school-based collaboration. The high alpha values provide confidence as to the consistency of the survey items within each domain, supporting the use of the resulting data in analyses.

Most Valued Practices

Table 17 presents the observed and expected frequencies for parents' most valued practices related to open communication. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 17

Observed Frequencies and Percentages and Expected Frequencies for Open Communication Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Honest Comm.	109	68.1	40
Clear channels	22	13.8	40
Open disc.	16	10	40
Share knowledge	13	8.1	40
Total	160	100	160

Note. Percentages are based on the total sample (N = 160). Collapsed practice labels: "Honest comm." = Easily understood and honest communication between me and the members of the school team; "Clear channels" = Easy and clear ways for me to communicate with the school team; "Open disc." = Open discussions with the school team when in disagreement with something regarding my child's special education services; "Share knowledge" = Opportunities to share my knowledge (about my child and other topics) and ideas with the school team.

A chi-square goodness-of-fit test was performed to determine whether the distribution of open communication practices followed a uniform distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the four options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of open communication practices differed significantly from an equal distribution. $(x^2(3), N = 160) = 159.75, p =< .001$. 'Honest communication' was chosen far more frequently than expected.

Table 18 presents the observed and expected frequencies for parents' most valued practices related to trust. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 18

Observed Frequencies and Percentages and Expected Frequencies for Trust Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Best interests	86	54%	32
Process	36	23%	32
New ideas	16	10%	32
Reliable & consistent	16	10%	32
Sharing	6	3%	32
Total	160	100%	160

Note. Percentages are based on the total sample (N = 160). Collapsed practice labels: "Best interests" = Each member of the special education team has my child's best interests in mind; "Process" = The team ensures I understand and am part of the process of planning for my child's special education services; "New ideas" = The team is open to new ideas and approaches I present to help my child; "Reliable & Consistent" = All team members are reliable and consistent when speaking about my child; "Sharing" = I can share knowledge and ideas with the school team with the belief that I will not be judged.

A chi-square goodness-of-fit test was performed to evaluate whether the distribution of trust practices followed a uniform distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the five options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of the trust practices was significantly different from an equal distribution, $(x^2(3), N = 160) = 159.75, p =< .001$. 'Best interests' was chosen far more frequently than expected.

Table 19 presents the observed and expected frequencies for parents' most valued practices related to mutual respect. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 19

Observed Frequencies and Percentages and Expected Frequencies for Mutual Respect Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Cultural background	11	7%	32
Compromise	18	11%	32
Conflict addressed	8	5%	32
Capable team	78	49%	32
Valued by team	45	28%	32
Total	160	100%	160

Note. Percentages are based on the total sample (N = 160). Collapsed practice labels: "Cultural background" = My family's cultural background and educational experiences are acknowledged and understood by the team; "Compromise" = Compromise, when needed, takes place due to team members' flexibility and responsiveness to feedback; "Conflict addressed" = Conflict between myself and team member(s) is addressed in a constructive and timely manner; "Capable team" = The school team is capable of meeting my child's needs; "Valued by team" = The school team values my input and treats me as a team member.

A chi-square goodness-of-fit test was performed to evaluate whether the distribution of mutual respect practices followed that of an equal distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the five options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of the mutual respect practices was significantly different from an equal distribution, $(x^2(4), N = 160) = 109.31, p =< .001$. 'Capable team' was chosen far more frequently than expected.

Table 20 presents the observed and expected frequencies for parents' most valued practices related to shared goals. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 20

Observed Frequencies and Percentages and Expected Frequencies for Shared Goals Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Mutual goal setting	61	38%	53.3
Input valued	9	6%	53.3
Working together	90	56%	53.3
Total	160	100%	160.0

Note. Percentages are based on the total sample (N = 160). Expected frequencies were calculated using the chi-square formula and are reported to the nearest decimal; small rounding differences may occur. Collapsed practice labels: "Mutual goal setting" = Goals are mutually created and agreed upon by all team members, including me as the parent; "Input valued" = My input in creating goals is valued; "Working together" = The entire team works together toward helping my child reach their goals.

A chi-square goodness-of-fit test was performed to evaluate whether the distribution of shared goal practices followed an equal distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the three options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of the shared goals practices was significantly different from an equal distribution, $(x^2(2), N = 160) = 63.16, p = < .001$. 'Working together' was chosen far more frequently than expected.

Table 21 presents the observed and expected frequencies for parents' most valued practices related to common understanding. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 21

Observed Frequencies and Percentages and Expected Frequencies for Common Understanding Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Receptive team	40	25%	40
Clear roles	36	22%	40
Valued roles	9	6%	40
Everyone aligned	75	47%	40
Total	160	100%	160

Note. Percentages are based on the total sample (N = 160). Collapsed practice labels: "Receptive team" = School team members are receptive to each other's contributions, including mine as the parent; "Clear roles" = Each team member's role is clear and purposeful to my child's special education programming; "Valued roles" = The school team, me included, values the role of each member of the team; "Everyone aligned" = The school team and I are aligned with what is best for my child.

A chi-square goodness-of-fit test was performed to evaluate whether the distribution of common understanding practices followed that of an equal distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the four options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of the common understanding practices was significantly different from an equal distribution, $(x^2(3), N = 160) = 55.05, p =< .001$. 'Everyone aligned' was chosen far more frequently than expected.

Table 22 presents the observed and expected frequencies for parents' most valued practices related to shared responsibility. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 22

Observed Frequencies and Percentages and Expected Frequencies for Shared Responsibility Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Roles performed	56	35%	53.3
Skills and resources	39	24%	53.3
Committed team	65	41%	53.3
Total	160	100%	160

Note. Percentages are based on the total sample (N = 160). Expected frequencies were calculated using the chi-square formula and are reported to the nearest decimal; small rounding differences may occur. Collapsed practice labels: "Roles performed" = Each team member accepts and performs their role in my child's special education plan; "Skills and resources" = I was made aware of skills and resources that each team member brings to the collaboration; "Committed team" = All team members are truly committed to the process.

A chi-square goodness-of-fit test was performed to determine whether the distribution of shared responsibility practices followed an equal distribution. The null hypothesis (H_0) states that parents would select each practice equally, indicating no preference among the three options. A significance threshold of $p < 0.05$was used for all tests. The distribution of shared responsibility practices differed significantly from an equal distribution, $(x^2(2), N = 160) = 6.53, p =< .038$. 'Committed team' was chosen most frequently, with 'roles performed' chosen just 6% less often.

Table 23 presents the observed and expected frequencies for parents' most valued practices related to active participation. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 23

Observed Frequencies and Percentages and Expected Frequencies for Active Participation Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Member contributions	73	46%	53.3
Active leaders	34	21%	53.3
Engaged members	53	33%	53.3
Total	160	100%	160.0

Note. Percentages are based on the total sample (N = 160). Expected frequencies were calculated using the chi-square formula and are reported to the nearest decimal; small rounding differences may occur. Collapsed practice labels: "Member contributions" = All team members contribute different and valuable resources toward achieving the creation of my child's special education services; "Active leaders" = Leaders are actively involved in creating change or working toward helping my child together with the team, myself included; "Engaged members" = All members are actively engaged.

A chi-square goodness-of-fit test was performed to determine whether the distribution of active participation practices followed a uniform distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the three options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of the active participation practices was significantly different from an equal distribution, $(x^2(2), N = 160) = 14.26, p =< .001$. 'Member contributions were chosen more frequently than expected.

Table 24 presents the observed and expected frequencies for parents' most valued practices related to shared decision making. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 24

Observed Frequencies and Percentages and Expected Frequencies for Shared Decision-Making Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Members encouraged	79	49%	53.3
Participation	32	20%	53.3
Understanding of process	49	31%	53.3
Total	160	100%	160.0

Note. Percentages are based on the total sample (N = 160). Expected frequencies were calculated using the chi-square formula and are reported to the nearest decimal; small rounding differences may occur. Collapsed practice labels: "Members encouraged" = Myself and all team members are encouraged to provide input in the decision-making process; "Participation" = All members participate in the decision-making process; "Understanding of process" = I am aware of and understand the process for making decisions and implementing actions regarding my child's special education services.

A chi-square goodness-of-fit test was performed to determine whether the distribution of shared decision-making practices followed a uniform distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the three options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of shared decision-making practices differed significantly from an equal distribution, $(x^2(2), N = 160) = 21.24, p =< .001$. 'Members encouraged' was chosen more frequently than expected.

Table 25 presents the observed and expected frequencies for parents' most valued practices related to implementation. The expected frequencies assume a uniform distribution, where each practice would be equally likely to be selected.

Table 25

Observed Frequencies and Percentages and Expected Frequencies for Implementation Domain

Practice	Observed Frequency	Percentage	Expected Frequency
Follow through	41	26%	40
Continued communication	45	28%	40
Continuous evaluation	51	32%	40
Responsiveness	23	14%	40
Total	160	100%	160

Note. Percentages are based on the total sample (N = 160). Collapsed practice labels: "Follow through" = Each member follows through with their role in the implementation of my child's special education services; "Continued communication" = Team members continue to communicate with me during the implementation of my child's special education services; "Continuous evaluation" = My child's performance is continually evaluated for effectiveness using a data-collection process; "Responsiveness" = If the chosen interventions are not effective for my child, I am informed promptly and the team reconvenes.

A chi-square goodness-of-fit test was performed to determine whether the distribution of implementation practices followed a uniform distribution. The null hypothesis (H_0) stated that parents would select each practice equally, indicating no preference among the three options. A significance threshold of $p < 0.05$ was used for all tests. The distribution of implementation practices differed significantly from an equal distribution, $(x^2(3), N = 160) = 9.55, p =< .023$. While 'continuous evaluation' was chosen most often, it was closely followed by both 'continued communication' and 'follow through.'

Summary of Most Valued Practices. As evidenced by significant chi-square goodness-of-fit results, all with a p-value of < .05, parents demonstrated clear preferences for certain practices over others in each domain of collaboration. Honest communication was valued most in the open communication domain. Within the trust domain, parents valued team members acting

with their child's best interests in mind. The most valuable practice for mutual respect was a capable team that worked together, the practice most valued under the shared goals domain. Having every team member aligned was valued most in the domain of common understanding. In the domain of shared responsibility, parents valued committed teams most, which was followed closely by team members being able to perform their roles effectively. Member contributions were most valued in the domain of active participation. In shared decision-making, parents valued when members were encouraged to provide input, and continuous evaluation was chosen most often for implementation. A common thread between the practices valued most by parents is that they are honest, aligned with their own beliefs, committed to, and will collectively work for the success of their child.

Demographics and Most Valued Practices

Chi-square tests of independence were used to examine the association between parent race/ethnicity, student disability category, and student age, and parents' most valued practices across the nine domains of collaboration. Before conducting chi-square analyses, it was necessary to review the distribution of responses across categories to ensure that all cell counts met the test's assumptions. To address low counts, original practices were collapsed into 2-3 broader groups per domain of collaboration, as well as parent race/ethnicity. This ensured that all expected counts met chi-square assumptions. Collapsing was not necessary for the student disability category or age, as all expected counts for these variables met chi-square assumptions.

Table 26 presents the observed frequencies and percentages of parents' most valued open communication practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 26

Observed Frequencies of Parents' Most Valued Open Communication Practices by Race/Ethnicity, Disability Category, and Student Age

		Honest comm./ Clear channels	Open disc./ Share knowledge	Total
Race	White	101 (78.9) [100.7]	21 (77.8) [21.3]	122
	Other	27 (21.1) [27.3]	6 (22.2) [5.7]	33
	Total	128	27	155
Disability Category	High Incidence	97 (78.2) [98.1]	24 (82.8) [22.9]	121
	Low Incidence	27 (21.8) [25.9]	5 (17.2) [6.1]	32
	Total	124	29	153
Age	Ages 5-10	85 (64.9) [83.5]	17 (58.6) [18.5]	102
	Ages 11-14	35 (26.7) [32.8]	5 (17.2) [7.3]	40
	Ages 15-19+	11 (8.4) [14.7]	7 (24.1) [3.3]	18
	Total	131	29	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander. Collapsed practice labels: "Honest comm." = Easily understood and honest communication between me and the members of the school team; "Clear channels" = Easy and clear ways for me to communicate with the school team; "Open disc." = Open discussions with the school team when in disagreement with something regarding my child's special education services; "Share knowledge" = Opportunities to share my knowledge (about my child and other topics) and ideas with the school team.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued open communication practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of

practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests. This distribution of responses did not differ significantly by race/ethnicity, $(x^2(1), N = 155) = .017, p = .896$ or by student disability category, $(x^2(1), N = 153) = .0292, p = .589$. There was a significant association between parents' most valued open communication practice and their students' age, $(x^2(2), N = 160 = 6.229, p = .044$. Parents of older students are more likely to opt for open discussions and knowledge sharing compared to parents of younger students. Overall, results suggest that students' age plays a more significant role in parents' perceptions of open communication.

Table 27 presents the observed frequencies and percentages of parents' most valued trust practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 27

Observed Frequencies of Parents' Most Valued Trust Practices by Race/Ethnicity, Disability Category, and Student Age

		Best interests	Process/ New ideas/ Reliable & Consistent/ Sharing	Total
Race	White, *n* (%)	73 (85.9%) [66.9]	49 (70.0) [55.1]	122
	Other, *n* (%)	12 (14.1) [18.1]	21 (30.0) [14.9]	32
	Total	85	70	155
Disability Category	High Incidence	64 (74.4) [67.9]	56 (84.8) [52.1]	120
	Low Incidence	22 (25.6) [18.1]	10 (15.2) [13.9]	32
	Total	86	66	152

Table 27 continued

		Best interests	Process/ New ideas/ Reliable & Consistent/ Sharing	Total
Age	Ages 5-10	53 (61.6) [54.8]	49 (66.2) [47.2]	102
	Ages 11-14	24 (27.9) [21.5]	16 (21.6) [18.5]	40
	Ages 15-19+	9 (10.5) [9.7]	9 (12.2) [8.3]	18
	Total	86	74	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander. Collapsed practice labels: "Best interests" = Each member of the special education team has my child's best interests in mind; "Process" = The team ensures I understand and am part of the process of planning for my child's special education services; "New ideas" = The team is open to new ideas and approaches I present to help my child; "Reliable & Consistent" = All team members are reliable and consistent when speaking about my child; "Sharing" = I can share knowledge and ideas with the school team with the belief that I will not be judged.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued trust practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests. There was a significant association between parents' most valued trust practice and parents' race/ethnicity, $(x^2(1), N = 155) = 5.778, p = .016$, but not by disability category, $(x^2(1), N = 152) = 2.444, p = .118$ or student age, $(x^2(2), N = 160) = .862, p = .650$. Parents identifying as an 'Other' race/ethnicity category were more likely to select 'process,'

'new ideas,' 'reliable & consistent, ' or 'sharing' over White parents. Overall, results suggest that parent race/ethnicity plays a more significant role in parents' perceptions of trust.

Table 28 presents the observed frequencies and percentages of parents' most valued mutual respect practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 28

Observed Frequencies of Parents' Most Valued Mutual Respect Practices by Race/Ethnicity, Disability Category, and Student Age

		Compromise/ Conflict addressed	Cultural background/ Valued by team/ Capable team	Total
Race	White, *n* (%)	15 (57.7) [20.5]	107 (82.9) [101.5]	122
	Other, *n* (%)	11 (42.3) [5.5]	22 (17.1) [27.5]	33
	Total	26	129	155
Disability Category	High Incidence	26 (100.0) [20.6]	95 (74.8) [100.4]	121
	Low Incidence	0 (0.0) [5.4]	32 (25.2) [26.6]	32
	Total	26	17	153
Age	Ages 5-10	18 (69.2) [16.6]	84 (62.7) [85.4]	102
	Ages 11-14	8 (30.8) [6.5]	32 (23.9) [33.5]	40
	Ages 15-19+	0 (0.0) [2.9]	18 (13.4) [15.1]	18
	Total	26	134	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian

or other Pacific Islander. Collapsed practice labels: "Cultural background" = My family's cultural background and educational experiences are acknowledged and understood by the team; "Compromise" = Compromise, when needed, takes place due to team members' flexibility and responsiveness to feedback; "Conflict addressed" = Conflict between myself and team member(s) is addressed in a constructive and timely manner; "Capable team" = The school team is capable of meeting my child's needs; "Valued by team" = The school team values my input and treats me as a team member.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued mutual respect practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests. There was a significant association between parents' most valued mutual respect practice and parents' race/ethnicity, $(x^2(1), N = 155) = 8.235, p = .004$ and student disability, $(x^2(1), N = 153) = 8.284, p = .004$. Parents identifying as white and those with students with high-incidence disabilities were more likely to select 'cultural background,' 'valued by the team,' or 'capable team' over 'compromise' and 'conflict addressed.' The distribution of responses did not differ significantly by student, $(x^2(2), N = 160) = 4.052, p = .132$. Overall, results suggest that parent race/ethnicity and the student's disability play a more significant role in parents' perceptions of mutual respect.

Table 29 presents the observed frequencies and percentages of parents' most valued shared goals practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 29

Observed Frequencies of Parents' Most Valued Shared Goals Practices by Race/Ethnicity, Disability Category, and Student Age

		Mutual goal setting/ Input valued	Working together	Total
Race	White, *n* (%)	50 (72.5) [54.3]	72 (83.7) [67.7]	122
	Other, *n* (%)	19 (27.5) [14.7]	14 (16.3) [18.3]	33
	Total	69	86	155
Disability Category	High Incidence	48 (68.6) [55.4]	73 (88.0) [65.6]	121
	Low Incidence	22 (31.4) [14.6]	10 (12.0) [17.4]	32
	Total	70	83	153
Age	Ages 5-10	48 (68.6) [44.6]	54 (60.0) [57.4]	102
	Ages 11-14	15 (21.4) [17.5]	25 (27.8) [22.5]	40
	Ages 15-19+	7 (10.0) [7.9]	11 (12.2) [10.1]	18
	Total	70	90	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander. Collapsed practice labels: "Mutual goal setting" = Goals are mutually created and agreed upon by all team members, including me as the parent; "Input valued" = My input in creating goals is valued; "Working together" = The entire team works together toward helping my child reach their goals.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued shared goals practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p <$

0.05 was used for all tests. There was a significant association between parents' most valued shared goals practice and disability category, $(x^2(1), N = 153) = 8.623, p = .003$. Parents of students with low-incidence disabilities were more likely to select 'mutual goal setting' or 'input valued' compared to the expected distribution. The distribution of selections did not differ by race/ethnicity, $(x^2(1), N = 155) = 2.895, p = .089$ or student age, $(x^2(2), N = 160) = 1.262, p = .532$. Overall, the results suggest that the disability category plays a more significant role in shaping parents' perceptions of shared goals.

Table 30 presents the observed frequencies and percentages of parents' most valued common understanding practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 30

Observed Frequencies of Parents' Most Valued Common Understanding Practices by Race/Ethnicity, Disability Category, and Student Age

		Receptive team/ Everyone aligned	Clear roles/ Valued roles	Total
Race	White, *n* (%)	91 (82.0) [87.4]	31 (70.5) [34.6]	122
	Other, *n* (%)	20 (18.0) [23.6]	13 (29.5) [9.4]	33
	Total	111	44	155
Disability Category	High Incidence	85 (78.7) [85.4]	36 (80.0) [35.6]	121
	Low Incidence	23 (21.3) [22.6]	9 (20.0) [9.4]	32
	Total	108	45	153

Table 30 continued

		Receptive team/ Everyone aligned	Clear roles/ Valued roles	Total
Age	Ages 5-10	72 (62.6) [73.3]	30 (66.7) [28.7]	102
	Ages 11-14	29 (25.2) [28.8]	11 (24.4) [11.3]	40
	Ages 15-19+	14 (12.2) [12.9]	4 (8.9) [5.1]	18
	Total	115	45	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander. Collapsed practice labels: "Receptive team" = School team members are receptive to each other's contributions, including mine as the parent; "Clear roles" = Each team member's role is clear and purposeful to my child's special education programming; "Valued roles" = The school team, me included, values the role of each member of the team; "Everyone aligned" = The school team and I are aligned with what is best for my child.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued common understanding practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests. The distribution of selections did not differ significantly by race/ethnicity, $(x^2(1), N = 153) = .032, p = .857$, disability category, $(x^2(1), N = 155) = 2.499, p = .114$, or student age, $(x^2(2), N = 160) = .402, p = .818$. Overall, results indicate that parents' perceptions of common understanding practices were independent of parent race/ethnicity, student disability, and age.

Table 31 presents the observed frequencies and percentages of parents' most valued shared responsibility practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 31

Observed Frequencies of Parents' Most Valued Shared Responsibility Practices by Race/Ethnicity, Disability Category, and Student Age

		Roles performed/ Skills and resources	Committed team	Total
Race	White, *n* (%)	75 (82.4) [71.6]	47 (73.4) [50.4]	122
	Other, *n* (%)	16 (17.6) [19.4]	17 (26.6) [13.6]	33
	Total	91	64	155
Disability Category	High Incidence	78 (88.6) [69.6]	43 (66.2) [51.4]	121
	Low Incidence	10 (11.4) [18.4]	22 (33.8) [13.6]	32
	Total	88	65	153
Age	Ages 5-10	59 (62.1) [60.6]	43 (66.2) [41.4]	102
	Ages 11-14	25 (26.3) [23.8]	15 (23.1) [16.3]	40
	Ages 15-19+	11 (11.6) [10.7]	7 (10.8) [7.3]	18
	Total	95	65	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander. Collapsed practice labels: "Roles performed" = Each team member accepts and performs their role in my child's special education plan; "Skills and resources" = I was made aware of skills and resources that each team member brings to the collaboration; "Committed team" = All team members are truly committed to the process.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the

most valued shared responsibility practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests. A chi-square test of independence indicated that parents' most valued shared responsibility practice did not differ significantly by race/ethnicity, $(x^2(1), N = 155) = 1.808, p = .179$ or by student age, $(x^2(2), N = 160) = .284, p =< .868$. There was a significant association between the most valued shared responsibility practice and disability category, $(x^2(1), N = 153) = 11.425, p =< .001$. Parents of students with low-incidence disabilities were more likely to value a 'committed team' over 'roles performed' or 'skills and resources,' which was selected more often by parents of students with high-incidence disabilities. Overall, the results suggest that the disability category plays a more significant role in shaping parents' perceptions of shared responsibility.

Table 32 presents the observed frequencies and percentages of parents' most valued active participation practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 32

Observed Frequencies of Parents' Most Valued Active Participation Practices by Race/Ethnicity, Disability Category, and Student Age

		Member contributions	Active leaders/ Engaged members	Total
Race	White, *n* (%)	60 (84.5) [55.9]	62 (73.8) [66.1]	122
	Other, *n* (%)	11 (15.5) [11]	22 (26.2) [17.9]	33
	Total	71	84	155

Table 32 continued

		Member contributions	Active leaders/ Engaged members	Total
Disability Category	High Incidence	65 (94.2) [54.6]	56 (66.7) [66.4]	121
	Low Incidence	4 (5.8) [14.4]	28 (33.3) [17.6]	32
	Total	69	84	153
Age	Ages 5-10	50 (68.5) [46.5]	52 (59.8) [55.5]	102
	Ages 11-14	19 (26.0) [18.3]	21 (24.1) [21.8]	40
	Ages 15-19+	4 (5.5) [8.2]	14 (16.1) [9.8]	18
	Total	73	87	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander. Collapsed practice labels: "Member contributions" = All team members contribute different and valuable resources toward achieving the creation of my child's special education services; "Active leaders" = Leaders are actively involved in creating change or working toward helping my child together with the team, myself included; "Engaged members" = All members are actively engaged.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued active participation practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests A chi-square test of independence indicated that parents' most valued active participation practice did not differ significantly by race/ethnicity, $(x^2(1), N = 155) = 2.628, p = .105$ or student age, $(x^2(2), N = 160) = 4.504, p = .105$. There was a significant association between the most valued active participation practice and disability category,

$(x^2(1), N = 153) = 17.366, p =< .001$. Parents of students with low-incidence disabilities were more likely to value 'active leaders' or 'engaged members, ' while parents of students with high-incidence disabilities were more likely to value 'member contributions.' Overall, the results suggest that the disability category plays a more significant role in shaping parents' perceptions of active participation.

Table 33 presents the observed frequencies and percentages of parents' most valued shared decision-making practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 33

Observed Frequencies of Parents' Most Valued Shared Decision-Making Practices by Race/Ethnicity, Disability Category, and Student Age

		Members encouraged/ Participation	Understanding of process	Total
Race	White, *n* (%)	81 (75.7) [84.2]	41 (85.4) [37.8]	122
	Other, *n* (%)	26 (24.3) [22.8]	7 (14.6) [10.2]	33
	Total	107	48	155
Disability Category	High Incidence	91 (87.5) [82.2]	30 (61.2) [38.8]	121
	Low Incidence	13 (12.5) [21.8]	19 (38.8) [10.2]	32
	Total	104	49	153
Age	Ages 5-10	65 (58.6) [70.8]	37 (75.5) [31.2]	102
	Ages 11-14	32 (28.8) [27.8]	8 (16.3) [12.3]	40
	Ages 15-19+	14 (12.6) [12.5]	4 (8.2) [5.5]	18
	Total	111	49	160

Note. Values are observed frequencies with column percentages in parentheses; expected frequencies appear in square brackets. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander. Collapsed practice labels: "Members encouraged" = Myself and all team members are encouraged to provide input in the decision-making process; "Participation" = All members participate in the decision-making process; "Understanding of process" = I am aware of and understand the process for making decisions and implementing actions regarding my child's special education services.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued active participation practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of practices; selections would be independent of these variables. A significance threshold of $p <$ 0.05 was used for all tests A chi-square test of independence indicated that parents' most valued shared decision-making practice did not differ significantly by race/ethnicity, $(x^2(1), N = 155) = 1.867, p = .172$ or student age, $(x^2(2), N = 160) = 4.256, p = .119$. There was a significant association between the most valued shared decision making practice and disability category, $(x^2(1), N = 153) = 13.902, p =< .001$. Parents of students with low-incidence disabilities were more likely to value 'understanding of process' or 'continual evaluation'. In contrast, parents of students with high-incidence disabilities were more likely to value 'members encouraged' or 'participation.' Overall, the results suggest that the disability category plays a more significant role in shaping parents' perceptions of shared decision making.

Table 34 presents the observed frequencies and percentages of parents' most valued implementation practices by parent race/ethnicity, student disability category, and student age, along with the expected counts.

Table 34

Observed Frequencies of Parents' Most Valued Implementation Practices by Race/Ethnicity, Disability Category, and Student Age

		Follow through/ Continual evaluation	Continued communication/ Responsiveness	Total
Race	White, *n* (%)	70 (76.9) [71.6]	52 (81.3) [50.4]	122
	Other, *n* (%)	21 (23.1) [19.4]	12 (18.8) [13.6]	33
	Total	91	64	155
Disability Category	High Incidence	74 (84.1) [69.6]	47 (72.3) [51.4]	121
	Low Incidence	14 (15.9) [18.4]	18 (27.7) [13.6]	32
	Total	88	65	153
Age	Ages 5-10	61 (66.3) [58.7]	41 (60.3) [43.3]	102
	Ages 11-14	24 (26.1) [23.0]	16 (23.5) [17.0]	40
	Ages 15-19+	7 (7.6) [10.4]	11 (16.2) [7.7]	18
	Total	92	68	160

Note. Race/ethnicity categories: "Other" = Hispanic or Latino, Black or African American, Other: American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander. Collapsed practice labels: "Follow through" = Each member follows through with their role in the implementation of my child's special education services; "Continued communication" = Team members continue to communicate with me during the implementation of my child's special education services; "Continuous evaluation" = My child's performance is continually evaluated for effectiveness using a data-collection process; "Responsiveness" = If the chosen interventions are not effective for my child, I am informed promptly and the team reconvenes.

Chi-square tests of independence were conducted to determine whether parent race/ethnicity, student disability category, or student age was associated with the selection of the most valued implementation practices. For each test, the null hypothesis (H_0) stated that there would be no association between the demographic variable and the parents' selection of

practices; selections would be independent of these variables. A significance threshold of $p < 0.05$ was used for all tests. A chi-square test of independence indicated that parents' most valued shared decision-making practice did not differ significantly by race/ethnicity, $(x^2(1), N = 155) = .420, p = .517$, disability category, $(x^2(1), N = 153) = 3.138, p = .076$, or student age, $(x^2(2), N = 160) = 2.875, p = .238$. Overall, results indicate that parents' perceptions of implementation practices were independent of parent race/ethnicity, student disability, and age.

Summary of Demographics and Most Valued Practices. Chi-square tests of independence were conducted to explore whether parents' most valued collaborative practices across the nine domains differed by their race/ethnicity, their student's disability category, or their student's age. To meet test requirements, parental race/ethnicity groups and some practices within domains were collapsed into broader groupings. Table 35 presents the domains and the demographic categories that most strongly influenced them.

Table 35

Demographics and Most Valued Practices

Domain	Significant Demographic	Key Finding
Open Communication	Student Age (p =.044)	Parents of older students more often valued open discussion and knowledge sharing.
Trust	Parent Race/Ethnicity (p = .016)	Parents identifying as "Other" were more likely to value process, new ideas, reliability, and sharing.
Mutual Respect	Parent Race/Ethnicity (p = .004) Disability Category (p = .003)	White parents and those of students with high-incidence disabilities emphasized team capability and being valued over conflict resolution.

Table 35 continued

Domain	Significant Demographic	Key Finding
Shared Goals	Disability Category ($p = .003$)	Parents of students with low-incidence disabilities prioritized mutual goal setting and valued input.
Common Understanding	None	No significant differences by race, disability, or age.
Shared Responsibility	Disability Category ($p < .001$)	Parents of students with low-incidence disabilities valued a committed team; those with high-incidence disabilities emphasized the importance of roles, skills, and resources.
Active Participation	Disability Category ($p < .001$)	Parents of students with low-incidence disabilities valued active leaders and engaged members.
Shared Decision-Making	Disability Category ($p < .001$)	Parents of students with low-incidence disabilities prioritized understanding of the process.
Implementation	None	No significant differences by race, disability, or age.

Parents' perceptions of school-based collaborative strategies varied most by student disability category, followed by race/ethnicity. Student age played a more minor but notable role.

Rates of Experiences

Table 36 presents the frequencies, percentages, means, and standard deviations of parents' reported experiences with open communication practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child's special education team during the 2024-2025 school year.

Table 36

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Open Communication Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Honest comm.	5 (3.1)	8 (5.0)	27 (16.9)	59 (36.9)	51 (38.1)	4.02	1.019
Clear channels	4 (2.5)	6 (3.8)	23 (14.4)	55 (34.4)	72 (45.0)	4.16	.975
Open disc.	6 (3.8)	9 (5.6)	38 (23.8)	44 (27.5)	63 (39.4)	3.93	1.094
Share knowledge	5 (3.1)	8 (5.0)	30 (18.8)	48 (30.0)	69 (43.1)	4.05	1.051

Note. Scores were measured on a 5-point scale, ranging from 1 (Never) to 5 (Always). Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: "Honest comm." = Easily understood and honest communication between me and the members of the school team; "Clear channels" = Easy and clear ways for me to communicate with the school team; "Open disc." = Open discussions with the school team when in disagreement with something regarding my child's special education services; "Share knowledge" = Opportunities to share my knowledge (about my child and other topics) and ideas with the school team.

Parents reported varying frequencies of experiencing different open communication practices with their child's special education team, with the majority occurring 'often' or 'always.' 'Clear channels' and 'share knowledge' were rated highest, with mean scores of 4.16 (*SD*=.975) and 4.05 (*SD*=1.051), respectively. This data indicates that open communication practices are generally perceived as being consistently implemented. 'Open discussions' had slightly lower ratings, suggesting this aspect of open communication could be enhanced. Overall,

these findings indicate that parents engage in most open communication practices at moderate to high frequencies.

Table 37 presents the frequencies, percentages, means, and standard deviations of parents' reported experiences with trust practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child's special education team during the 2024-2025 school year.

Table 37

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Trust Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Best interests	5 (3.1)	7 (4.4)	24 (15.0)	51 (31.9)	73 (45.6)	4.13	1.026
Process	5 (3.1)	3 (1.9)	28 (17.5)	50 (31.3)	74 (46.3)	4.16	.988
New ideas	4 (2.5)	11 (6.9)	33 (20.6)	54 (33.8)	58 (36.3)	3.94	1.036
Reliable & Consistent	6 (3.8)	10 (6.3)	27 (16.9)	51 (31.9)	66 (41.3)	4.01	1.084
Sharing	4 (2.5)	11 (6.9)	25 (15.6)	51 (31.9)	69 (43.1)	4.06	1.044

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: "Best interests" = Each member of the special education team has my child's best interests in mind; "Process" = The team ensures I understand and am part of the process of planning for my child's special education services; "New ideas" = The team is open to new ideas and approaches I present to help my child; "Reliable & Consistent" = All team members are reliable and consistent when speaking about my child; "Sharing" = I can share knowledge and ideas with the school team with the belief that I will not be judged.

Parents reported varying frequencies of experiencing different trust practices with their student's special education team, with the majority occurring 'often' or 'always.' 'Process' and

'best interests' were rated highest, with mean scores of 4.16 (*SD*=.988) and 4.13 (*SD*=1.026), respectively. This data indicates that trust practices are generally perceived as being consistently implemented. 'New ideas' had slightly lower ratings, suggesting that his practice could be improved upon. Overall, these findings indicate that parents engage in most trust practices with moderate to high frequency.

Table 38 presents the frequencies, percentages, means, and standard deviations of parents' reported experiences with mutual respect practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child's special education team during the 2024-2025 school year.

Table 38

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Mutual Respect Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Cultural background	8 (5.0)	7 (4.4)	30 (18.8)	39 (24.4)	76 (47.5)	4.05	1.137
Compromise	8 (5.0)	9 (5.6)	27 (16.9)	58 (36.3)	58 (36.3)	3.93	1.100
Conflict addressed	18 (11.3)	10 (6.3)	25 (15.6)	44 (27.5)	63 (39.4)	3.78	1.332
Capable team	6 (3.8)	11 (6.9)	26 (16.3)	45 (28.1)	72 (45.0)	4.04	1.110
Valued by team	5 (3.1)	7 (4.4)	27 (16.9)	41 (25.6)	80 (50.0)	4.15	1.053

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. M = Mean. SD = Standard deviation. Collapsed practice labels: “Cultural background” = My family’s cultural background and educational experiences are acknowledged and understood by the team; “Compromise” = Compromise, when needed, takes place due to team members’ flexibility and responsiveness to feedback; “Conflict addressed” = Conflict between myself and team member(s) is addressed in a constructive and timely manner; “Capable team” = The school team is capable of meeting my child’s needs; “Valued by team” = The school team values my input and treats me as a team member.

Parents reported varying frequencies of experiences regarding mutual respect practices, with the majority occurring ‘often’ or ‘always.’ Highest rated were ‘valued by team’ and ‘cultural background’ with mean scores of 4.15 (*SD*=1.110) and 4.05 (*SD*=1.137), respectively. ‘Conflict addressed’ had the lowest ratings, suggesting this practice could be improved. Overall, these findings indicate that parents experience mutual respect fairly frequently.

Table 39 presents the frequencies, percentages, means, and standard deviations of parents’ reported experiences with shared goal practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child’s special education team during the 2024-2025 school year.

Table 39

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Shared Goals Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Mutual goal setting	4 (2.5)	6 (3.8)	29 (18.1)	44 (27.5)	77 (48.1)	4.15	1.011
Input valued	4 (2.5)	10 (6.3)	27 (16.9)	48 (30.0)	71 (48.1)	4.08	1.043
Working together	3 (1.9)	6 (3.8)	25 (15.6)	43 (26.9)	83 (51.9)	4.23	.973

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: "Mutual goal setting" = Goals are mutually created and agreed upon by all team members, including me as the parent; "Input valued" = My input in creating goals is valued; "Working together" = The entire team works together toward helping my child reach their goals.

The ratings 'often' and 'always' accounted for the majority of parent experiences for each of the practices within the domain of shared goals. 'Working together' was rated highest, with a mean of 4.23 (*SD* = 0.973), while the remaining practices still averaged above 4. Overall, these findings suggest that parents engage in high rates of shared goal practices comparatively.

Table 40 presents the frequencies, percentages, means, and standard deviations of parents' reported experiences with common understanding practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child's special education team during the 2024-2025 school year.

Table 40

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Common Understanding Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Receptive team	3 (1.9)	8 (5.0)	25 (15.6)	53 (33.1)	71 (44.4)	4.13	.979
Clear roles	2 (1.3)	10 (6.3)	22 (13.8)	54 (33.8)	72 (45.0)	4.15	.966
Valued roles	3 (1.9)	7 (4.4)	19 (11.9)	54 (33.8)	77 (48.1)	4.22	.949
Everyone aligned	4 (2.5)	12 (7.5)	22 (13.8)	48 (30.0)	74 (46.3)	4.10	1.059

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: "Receptive team" = School team members are receptive to each other's contributions, including mine as the parent; "Clear roles" = Each team member's role is clear and purposeful to my child's special education programming; "Valued roles" = The school team, me included, values the role of each member of the team; "Everyone aligned" = The school team and I are aligned with what is best for my child.

'Often' and 'always' comprised the majority of parents' responses to their rates of experience with the practices of the common understanding domain. Rated to be experienced most often was the practice of 'roles performed' with a mean of 4.13 (*SD*=.976), with 'committed team' also being rated on average higher than 4 with a mean of 4.09 (*SD*=1.030). Rated as being experienced the least, but still between 'sometimes' and 'often' was 'skills and resources' with a mean of 3.96 (*SD*=1.069). Overall, parents experience high rates of common understanding practices with a relative weakness regarding skills and resources.

Table 41 presents the frequencies, percentages, means, and standard deviations of parents' reported experiences with shared responsibility practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child's special education team during the 2024-2025 school year.

Table 41

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Shared Responsibility Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Roles performed	2 (1.3)	9 (5.6)	28 (17.5)	49 (30.6)	72 (45.0)	4.13	.976
Skills and resources	5 (3.1)	9 (5.6)	37 (23.1)	45 (28.1)	64 (40.0)	3.96	1.069
Committed team	4 (2.5)	9 (5.6)	27 (16.9)	49 (30.6)	71 (44.4)	4.09	1.030

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: "Roles performed" = Each team member accepts and performs their role in my child's special education plan; "Skills and resources" = I was made aware of skills and resources that each team member brings to the collaboration; "Committed team" = All team members are truly committed to the process.

The majority of parents reported experiencing shared responsibility practices 'often' or 'always.' Receiving the highest rating (*M*=4.13 *SD*=,976) was 'roles performed' with 75.6% of parents reporting experiencing this practice 'often' or 'always.' 'Committed team' was also reported to occur 'often' or 'always (*M*=4.09, *SD*=1.030). Though still rated positively, 'skills and resources' was reported to occur 68.1% of the time. These findings suggest that the practices

of shared responsibility occur regularly with ‘roles performed’ and ‘committed team’ as slightly stronger than ‘skills and resources.’

Table 42 presents the frequencies, percentages, means, and standard deviations of parents’ reported experiences with active participation practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child’s special education team during the 2024-2025 school year.

Table 42

Frequencies, Percentages, Means, and Standard Deviations of Parents’ Reported Experiences of Active Participation Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Member contributions	3 (1.9)	7 (4.4)	30 (18.8)	53 (33.1)	67 (41.9)	4.09	.974
Active leaders	4 (2.5)	12 (7.5)	30 (18.8)	55 (34.4)	59 (36.9)	3.96	1.042
Engaged members	3 (1.9)	12 (7.5)	26 (16.3)	50 (31.3)	69 (43.1)	4.06	1.032

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: “Member contributions” = All team members contribute different and valuable resources toward achieving the creation of my child’s special education services; “Active leaders” = Leaders are actively involved in creating change or working toward helping my child together with the team, myself included; “Engaged members” = All members are actively engaged.

Parents reported experiencing active participation practices at generally high levels. Most responses indicated these practices occurred ‘often’ or ‘always.’ The highest-rated aspect was member contributions (*M* = 4.09, *SD* = .974), with 76% indicating that it was frequently observed. Receiving the lowest rating, relatively speaking, was ‘active leaders’ (*M*=3.96,

SD=1.042) with 74.4% reporting experiencing it ‘often’ or ‘always.’ These findings suggest that parents perceive active participation practices as well established, with minimal differences in ratings.

Table 43 presents the frequencies, percentages, means, and standard deviations of parents’ reported experiences with shared decision-making practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child’s special education team during the 2024-2025 school year.

Table 43

Frequencies, Percentages, Means, and Standard Deviations of Parents’ Reported Experiences of Shared Decision-Making Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Members encouraged	2 (1.3)	9 (5.6)	26 (16.3)	53 (33.1)	70 (43.8)	4.13	.963
Participation	5 (3.1)	6 (3.8)	30 (18.8)	48 (30.0)	71 (44.4)	4.09	1.030
Understanding of process	3 (1.9)	4 (2.5)	29 (18.1)	49 (30.6)	75 (46.9)	4.18	.944

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: “Members encouraged” = Myself and all team members are encouraged to provide input in the decision-making process; “Participation” = All members participate in the decision-making process; “Understanding of process” = I am aware of and understand the process for making decisions and implementing actions regarding my child’s special education services.

Parents reported frequently experiencing shared decision-making practices, with mean ratings ranging from 4.09 to 4.18. Across all three practices, the majority of parents (73-78%) indicated that they occurred ‘often’ or ‘always’, with ‘understanding of the process’ rated as the highest.

Table 44 presents the frequencies, percentages, means, and standard deviations of parents' reported experiences with implementation practices. The table summarizes the frequency with which parents experienced each practice when interacting with their child's special education team during the 2024-2025 school year.

Table 44

Frequencies, Percentages, Means, and Standard Deviations of Parents' Reported Experiences of Implementation Practices

Practice	Never *n* (%)	Rarely *n* (%)	Sometimes *n* (%)	Often *n* (%)	Always *n* (%)	*M*	*SD*
Follow through	4 (2.5)	11 (6.9)	25 (15.6)	50 (31.3)	70 (40.3)	4.07	1.047
Continued communication	7 (4.4)	20 (12.5)	30 (18.8)	40 (25)	63 (39.4)	3.83	1.206
Continuous evaluation	6 (3.8)	15 (9.4)	27 (16.9)	44 (27.5)	68 (42.5)	3.96	1.146
Responsiveness	13 (8.1)	21 (13.1)	34 (21.3)	34 (21.3)	58 (36.3)	3.64	1.310

Note. Scores reflect a 5-point scale. Frequencies represent parent responses with percentages in parentheses. *M* = Mean. *SD* = Standard deviation. Collapsed practice labels: "Follow through" = Each member follows through with their role in the implementation of my child's special education services; "Continued communication" = Team members continue to communicate with me during the implementation of my child's special education services; "Continuous evaluation" = My child's performance is continually evaluated for effectiveness using a data-collection process; "Responsiveness" = If the chosen interventions are not effective for my child, I am informed promptly and the team reconvenes.

Parents generally perceived implementation practices as occurring with moderate to high frequency. 'Follow through' received the highest average rating (*M*=4.07, *SD*=1.047), while 'responsiveness' was rated lowest (*M*=3.64, *SD*=1.310), though it was still reported to be experienced by a majority of the parents 'often' or 'always.'

Summary of Rates of Experience. Across all domains, parents reported experiencing collaborative practices with the child's special education team at moderate to high frequencies, with most practices rated as 'often' or 'always'. The highest rated practices included clear communication channels ($M = 4.16$), working together toward goals ($M = 4.23$), and understanding the decision-making process ($M = 4.18$). The lowest, though still positive, ratings were observed for responsiveness during implementation ($M = 3.64$) and addressing conflict ($M = 3.78$). Overall, the data indicate that parents frequently experience the practices outlined in each of the domains.

Qualitative Results

Demographics

Of the 160 participants who completed the survey, 54 indicated they were willing to participate in an interview. Volunteers were contacted via text message or email and invited to sign up for a 15-minute interview session scheduled for September 20 or 21, 2025. Thirteen of the fourteen sessions were claimed, and ten of those sessions resulted in interviews. Due to technical errors in recording two of the interviews, the researcher had eight remaining interviews and transcripts from which to derive data.

Table 45 presents the parental race/ethnicity data for interviewees, the ages of their students as of December 1, 2024, and the disability category under which their students were receiving special education services.

Table 45

Demographic Characteristics of Interview Participants (N=8)

Participant	Race/Ethnicity	Student Age	Disability Category
1	Black	16	Unknown
2	White	6	Unknown
3	White	5	Speech and Language Impairment
4	White	10	Autism
5	White	8	Special Learning Disability
6	White	14	OHI
7	White	6	Autism
8	White	11	Intellectual Disability

Facilitators and Barriers

In the interviews, participants were asked to identify any factors that supported or hindered their collaboration with their students' school-based team. Their responses were categorized into either facilitators or barriers. Responses classified as facilitators were those that the parent perceived as strengthening collaboration, while those responses identified as barriers represented factors that created obstacles or weakened collaboration. Table 45 provides the frequency of responses to facilitators of each of the nine domains of collaboration, and Table 46 provides the frequencies for barriers. These tables provide a visual representation of the patterns that emerged from the interviews, while direct quotes and parent descriptions offer additional context and depth to the frequency data.

Table 46 demonstrates that parents most often described positive experiences within the domains of open communication, trust, and mutual respect. The parents who reported these

facilitators described practices that allowed them to both give and receive honest communications, ensured their students' best interests were prioritized, and affirmed their roles as equal members of the team. A frequently mentioned as a facilitator was the accessibility of the team, "I can reach out to them at any time I need to. They know they can reach out to me." Trust in the team supporting their child emerged as a critical factor. One parent shared that, for the first time in a long time, she felt able to "take a deep breath," expressing confidence that her child was receiving the support they needed at school. A sense of mutual respect, both by and for parents, as conveyed through the school's actions, was also emphasized across interviews. Several parents discussed how respect was conveyed by the school's willingness to listen and adjust practices. For example, one parent shared, "They wanted to put our student into strictly a self-contained classroom, but when we said no, that's not going to work for us, the school was willing to adjust their approach." Some domains, such as shared goals, common understanding, shared responsibility, and shared decision-making, were mentioned less frequently; however, when discussed, parents emphasized their importance to collaboration with the school team. Collectively, these qualitative findings, supported by the frequency counts and direct quotes, provide a deeper understanding of parents' experiences with facilitators of collaboration.

Table 46

Frequency of Responses Regarding Facilitators for Domains of Collaboration

	Participant								
Domain	1	2	3	4	5	6	7	8	Total
Open Communication	X		X	X	X		X		5
Trust	X	X	X	X			X	X	6
Mutual Respect	X		X		X		X	X	5
Shared Goals			X						1
Common Understanding							X		1
Shared Responsibility					X				1
Active Participation				X	X	X			3
Shared Decision-Making	X								1
Implementation		X		X	X			X	4

In contrast, Table 47 provides the frequencies of barriers mentioned within the nine domains of collaboration. While barriers were not discussed as frequently as facilitators, those that were mentioned were primarily clustered in the areas of open communication and implementation. A recurring theme was centered on how open communication between parents and school personnel was sometimes perceived as combative. One parent explained, in reference to requesting specific services, “And so the battle of that begins if you want a different specialized service that is not suggested by one of their top-notch people, providing the proof and the justification. And that’s, I think that’s the biggest hurdle anywhere.” Another parent

expressed similar concerns: “Do I put up a fight and try to get more services when this one OT does 7th through 12th and is already overworked?” The mention of the Occupational Therapist’s workload also reflects a barrier to the effective implementation of student services. A lack of data collection was also identified as a barrier to implementing services, as progress data is necessary to evaluate student growth and the effectiveness of their programming. One parent remarked, “It sounds really great. We’re going to collect data. But I have seen most special education settlements happening because there’s no data collected.” Although barriers in some domains, such as mutual respect, shared goals, and active participation, were mentioned less often, when they did occur, they had a significant negative impact on the parents’ perceptions of collaboration. As one parent described, “As a parent, you have to play the game of request, know the law, but act like you don’t know the law so that the school can still feel like they are in the hierarchy above you.” Experiences such as this demonstrate how even infrequent barriers can leave a lasting impression that shapes future interactions with the school team. Barriers, although they arise less frequently than facilitators, can deeply undermine collaborative relationships between families and schools.

Table 47

Frequency of Responses Regarding Barriers for Domains of Collaboration

	Participant								
Domain	1	2	3	4	5	6	7	8	Total
Open Communication	X	X				X			3
Trust						X	X		2
Mutual Respect						X			1
Shared Goals						X			1
Common Understanding						X		X	2
Shared Responsibility					X			X	2
Active Participation								X	1
Shared Decision-Making					X	X			2
Implementation	X	X				X			3

The facilitators and barriers identified by parents offer a more complex perspective on collaboration between families and schools. Highlighted in tables 46 and 47 are the frequencies at which parents mentioned facilitators or barriers, while the quotes provide depth to these numbers. The findings suggest that practices within domains can act as either facilitators or barriers, depending on how they are enacted by school personnel and perceived by parents.

Summary

This chapter presented the results of a web-based survey and virtual interviews examining parents' perspectives on school-based collaboration for students receiving special

education services. Survey responses ($N = 162$) and interviews ($n = 10$) revealed the school-based practices that parents value most, how these preferences vary by demographics, and the frequency with which parents experience these practices in their interactions with school teams. Across the nine collaboration domains, parents consistently prioritized open communication, trust, mutual respect, shared goals, and active participation, with some variations depending on the student's age, disability category, and the parent's race/ethnicity. Interview data supported these findings, providing context for the survey results and insight into the facilitators and barriers to effective collaboration. The data indicate that while parents generally experience many collaborative practices positively, certain areas, such as implementation, require further attention. These findings will be further discussed, including their implications for practices, limitations, and recommendations in Chapter 5.

Chapter 5 – Discussion

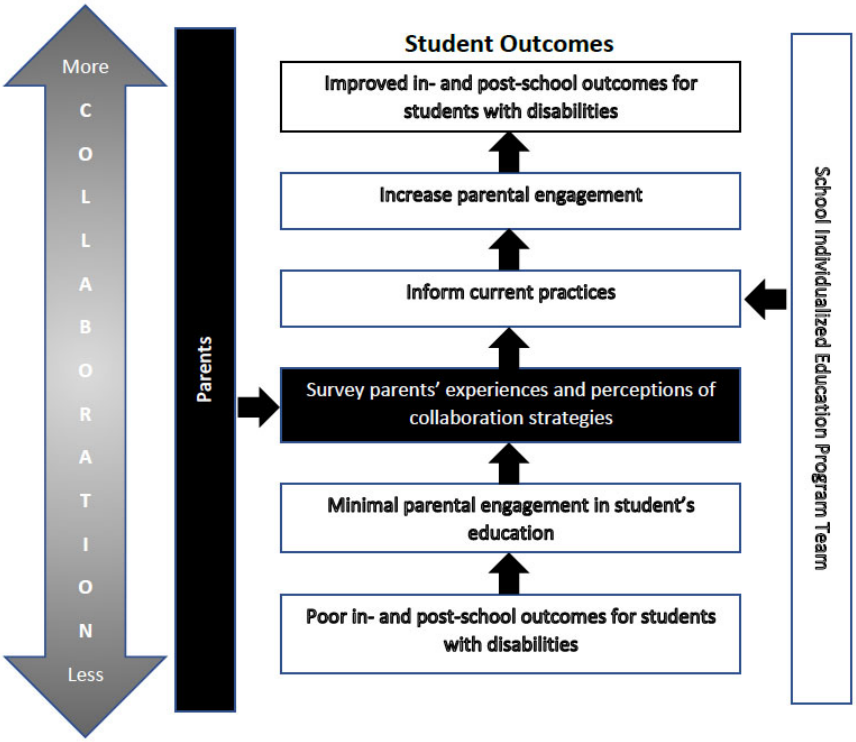
Overview

Despite years of legislative efforts and the work of dedicated teams of educators, students with disabilities continue to underperform across academic areas when compared to their regular education peers (NAEP, n.d.). Determined to be a vital factor in SWD's success in-school and post-secondary is the collaboration between stakeholders, specifically families and school districts (Anderson-Butcher & Aston, 2004; Daaboul, 2022). Aware of the numerous benefits of developing and maintaining collaborative relationships with parents of students with disabilities, many models and frameworks have been designed to support schools in these endeavors. Griffiths et al. (2021), building upon the work of others, created a universal model of collaboration for schools, which was adapted for this study. Griffiths et al.'s model provided a structure that could enable a deeper analysis of the key elements, referred to as domains throughout the study, needed to be present to foster collaboration: (a) open communication, (b) trust, (c) mutual respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, (h) shared decision-making, (i) implementation.

Figure 4 provides a visual representation of the logic of this study. By surveying parents regarding their experiences and perceptions of the domains of collaboration, school-based practices can be informed to better engage parents and improve outcomes for their students with disabilities.

Figure 4

Logic Model



To access these experiences and perceptions, the researcher developed survey and interview questions based on previously established and successfully utilized parental engagement questionnaires, as well as existing literature on collaboration, and Pennsylvania's State Performance Plan Indicator 8 – School-Facilitated Parent Involvement measure (Pennsylvania Training and Technical Assistance Network, 2018). The data collected from the survey and interviews were used to answer the following research questions:

1. What do parents believe to be the most valuable school-based practice in each of the domains of collaboration (i.e. (a) open communication, (b) trust, (c) mutual respect, (d) shared goals, (e) common understanding, (f) shared responsibility, (g) active participation, (h) shared decision-making, and (i) implementation)?

2. Is there a relationship between demographics (i.e., (a) parents' race/ethnicity, (b) student's age, (c) student disability category) and what parents deem the most valuable school-based collaborative practice?
3. How often do parents experience the practices of each collaboration domain when engaging with their school district regarding their student's special education services?
4. What barriers and facilitators of parental collaboration exist for parents of school-aged students receiving special education services, in each of the domains of collaboration?

In this chapter, the study's findings will be organized by research question, summarized, and discussed, along with their implications for practice. Limitations of the study will be addressed. Recommendations will be made regarding how the findings can be best utilized along with implications for future research. In conclusion, the significance of this study and the importance of continued research on school-based practices will be discussed.

Summary of Findings

Research Question 1

Parents were asked to identify their most valued school-based practice in each domain of collaboration. As shown in Table 48, the most frequently selected practice in the domain of open communication was "Easily understood and honest communication between me and the members of the school team" (68.1%). Within the domain of trust, parents most often indicated that "Each member on the special education team has my child's best interests in mind" (54%). Under the domain of mutual respect, parents most often chose "The school team is capable of meeting my child's needs" (49%). "The entire team works together toward helping my child

reach their goals" (56%) was identified as the most valued practice in the domain of shared goals. Under common understanding, "The school team and I are aligned with what is best for my child" (47%). The most frequent response in active participation, with 46% of responses, was "All team members contribute different and valuable resources toward achieving the creation of my child's special education services." Within shared decision-making, 49% reported valuing "Myself and all team members are encouraged to provide input in the decision-making process." Lastly, under implementation, the most frequently chosen practice was "My child's performance is continually evaluated for effectiveness using a data-collection process" (32%).

Table 48

Parents' Most Valued School-Based Practices Within Each Domain of Collaboration

Domain	Most Valued Practice	Number of Responses (%)
Open Communication	Easily understood and honest communication between me and the members of the school team.	109 (68.1%)
Trust	Each member of the special education team has my child's best interests in mind	86 (54%)
Mutual Respect	The school team is capable of meeting my child's needs.	78 (49%)
Shared Goals	The entire team works together toward helping my child reach their goals.	90 (56%)

Table 47 continued

Domain	Most Valued Practice	Number of Responses (%)
Common Understanding	The school team and I are aligned with what is best for my child.	75 (47%)
Shared Responsibility	All team members are truly committed to the process.	65 (41%)
Active Participation	All team members contribute different and valuable resources toward achieving the creation of my child's special education services.	73 (46%)
Shared Decision-Making	Myself and all team members are encouraged to provide input in the decision-making process.	79 (49%)
Implementation	My child's performance is continually evaluated for effectiveness using a data-collection process.	51 (32%)

Note. Percentages are based on the total sample size ($N = 160$).

From these most-valued practices, it is clear that parents desire clear and honest communication from capable team members with whom they are aligned and who engage in ongoing evaluation of their students' progress.

Research Question 2

Chi-square tests of independence were conducted to determine if parent/race ethnicity or student demographics (i.e., disability category and age) were associated with the most valued

practices within each collaboration domain. Table 49 highlights the variables that were found to be associated with parents' most valued practices.

Table 49

Summary of Chi-Square Tests of Independence by Domain and Demographic Variable

Domain	Race/Ethnicity	Disability Category	Student Age
Open Communication	Fail to reject H_0	Fail to reject H_0	**Reject H_0**
Trust	**Reject H_0**	Fail to reject H_0	Fail to reject H_0
Mutual Respect	**Reject H_0**	**Reject H_0**	Fail to reject H_0
Shared Goals	Fail to reject H_0	**Reject H_0**	Fail to reject H_0
Common Understanding	Fail to reject H_0	Fail to reject H_0	Fail to reject H_0
Shared Responsibility	Fail to reject H_0	**Reject H_0**	Fail to reject H_0
Active Participation	Fail to reject H_0	Fail to reject H_0	Fail to reject H_0
Shared Decision-Making	Fail to reject H_0	**Reject H_0**	Fail to reject H_0
Implementation	Fail to reject H_0	Fail to reject H_0	Fail to reject H_0

Note. H_0= Null hypothesis. Rejecting H_0 indicates a statistically significant association between the demographic variable and the valued practice within the domain.

As shown in Table 48, an association was found between race/ethnicity and the most-valued practices in the domains of trust and mutual respect. Disability category was associated with mutual respect, shared goals, shared responsibility, and shared decision-making. The only domain to be associated with student age was open communication. For all other domains and demographic variables, no statistically significant associations were found.

Research Question 3

Table 50 presents the means and standard deviations for parents' reported experiences across the nine domains of collaboration.

Table 50

Means and Standard Deviations of Parent Experiences Across Collaboration Domains

Domain	*M*	*SD*
Open Communication	4.03	.942
Trust	4.05	.945
Mutual Respect	3.98	.965
Shared Goals	4.15	.948
Common Understandings	4.15	.921
Shared Responsibility	4.05	.960
Active Participation	4.03	.955
Shared Decision-Making	4.13	.893
Implementation	3.87	1.093

Note. Scores reflect a 5-point scale.

Mean scores across domains were all close to 4.0, suggesting that parents generally perceived collaborative practices as occurring frequently. Receiving the highest ratings were 'shared goals' (*M*=4.15, *SD*=.948) and 'common understanding' (*M*=4.15, *SD*=.921), while 'implementation' was rated lowest (*M*=3.87, *SD*=1.093). While all domains were experienced positively, parents identified slightly stronger experiences of 'shared goals' and 'common understanding' compared to 'implementation.'

Research Question 4

In the interviews, parents identified factors that either facilitated or hindered collaboration with their students' school-based teams. Facilitators were practices that assisted or strengthened collaboration, while barriers were practices that created challenges and obstacles to collaboration. Across the nine domains, parents frequently described positive experiences with open communication, trust, and mutual respect. Mentioned less often, but still important, were shared goals, common understanding, shared responsibility, and shared decision-making.

Reported at a much lower rate were the barriers parents experienced when collaborating with school teams. Although these were reported less frequently, they still have a notable impact, especially in the domains of open communication and implementation. Parents reported challenges with combative interactions, limited personnel, and insufficient data collection to support decision-making. Mutual respect and active participation were less frequently cited as barriers; however, they still had the potential to influence parents' perceptions of collaboration negatively.

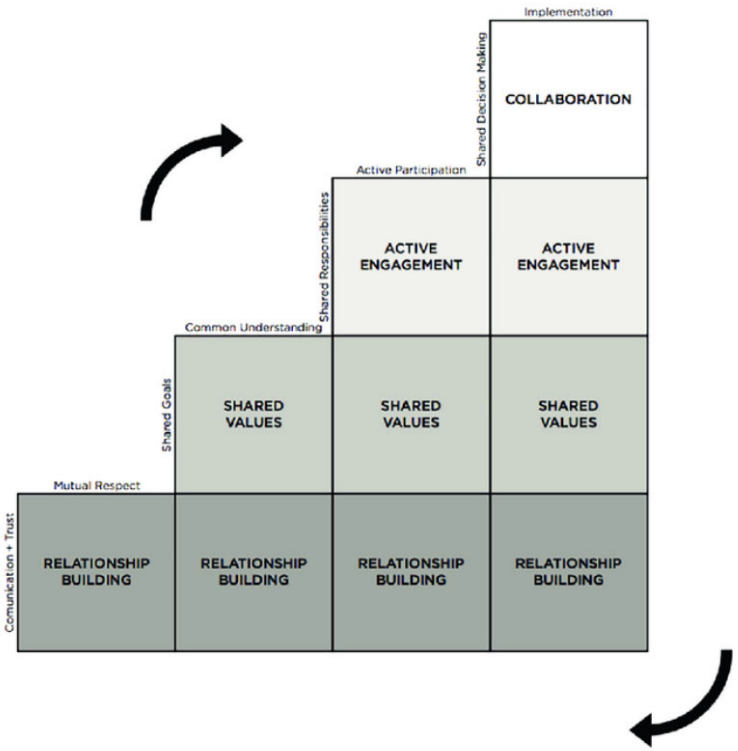
Discussion and Implications of Findings

Research Question 1

Effective collaboration in schools requires both structure and engagement with parents. Griffiths et al. (2021) describe collaboration as a set of interdependent building blocks. As shown in Figure 5, trust, open communication, and mutual respect are necessary for relationship building; shared goals and common understanding foster shared values; active engagement is grounded in shared responsibilities and active participation; and collaboration is enabled by shared decision-making and implementation. These elements are non-linear, allowing the teams to revisit foundational components as needed to enhance collaboration.

Figure 5

Building Blocks of Collaboration



Parents' perspectives reflect and extend these principles. Based upon these most-valued practices from research question 1, parents desire collaboration with the school team to be characterized by transparent and comprehensible communication, collective commitment, and a shared understanding of what is in the best interest of their student. They value team members who align with goals, demonstrate the capability to meet their students' needs, and contribute their knowledge to the development and implementation of the IEP. These findings suggest that collaboration is most effective when parents are included as active participants in the decision-making process, a finding supported by the work of Christenson (2003) and Epstein (2018). Additionally, ongoing evaluation of student progress through data collection ensures instruction remains effective and responsive to individual needs (Turnbull et al., 2018). The data indicate

that successful collaboration is dependent upon structural processes and the quality of relationships between families and schools (Cowan et al., 2004; Epstein, 2001).

Research Question 2

Race/Ethnicity. Parents identifying as white were more likely to select those practices more closely associated with being recognized and respected by the team, such as 'cultural background,' 'valued by the team,' or 'capable team.' Viewed as less valuable were the practices related to compromise and addressing conflict. In contrast, parents identifying as an 'Other' race/ethnicity category were more likely to select 'process,' 'new ideas,' 'reliable & consistent, ' or 'sharing.' This difference in preferences suggests that parents' race/ethnicity can influence their desired collaborative experiences, specifically regarding how the team functions and their behaviors (Harry et al., 1995; Kalyanpur et al., 2000; Trainor, 2010; Turnbull & Turnbull, 2021).

Student Age. Student age also influenced parents' perceptions of collaborative practices. Parents of older students are more likely to opt for 'open discussions' and 'knowledge sharing' compared to parents of younger students. The shift in practices can be viewed as necessary to facilitate more dialogue between the school team and students as they get older. This aligns with research, which suggests that families and educators adjust their collaborative practices as students progress through grade levels, with a greater emphasis on how to best prepare students for life post-secondary (Christenson, 2003; Epstein, 2001).

Disability Category. Most valued practices also differed by the student's disability category. Parents of students with low-incidence disabilities were more likely to value the practices of 'committed team,' 'active leaders,' 'engaged members,' 'understanding of process,' 'continual evaluation,' 'mutual goal setting, and 'input valued. Parents with students with high-incidence disabilities were more likely to select 'cultural background,' 'valued by the team,'

‘capable team,’ ’ member contributions,’ ‘members encouraged,’ and ‘participation.’ These findings suggest that parents of students with more complex needs look for teams that are consistent, committed, and engaged, while parents of high-incidence disabilities may focus more on functionality and clear responsibilities (Blair et al., 2011; Mueller & Vick, 2019; Griffiths et al., 2021; Turnbull & Turnbull, 2021).

These results suggest that demographic factors, including race/ethnicity, disability category, and student age, can influence which collaborative practices parents value most. The implications of these associations will be discussed later in this chapter.

Research Question 3

The mean scores for rates of experience across the collaboration domains were all close to 4.0, indicating that parents generally experienced these collaborative practices as occurring ‘often’ when engaging with the school district regarding their student’s special education services. Shared goals and a common understanding received the highest ratings (M = 4.15, SD = .948; M = 4.15, SD = .921, respectively), while implementation was rated slightly lower (M = 3.87, SD = 1.093). These findings suggest that parents generally experienced higher rates of practices in areas such as shared goals and common understanding. (Christenson, 2003; Epstein, 2001). Meaningful engagement is most successful when parents perceive the school team to be aligned with their goals and objectives for their student, strengthening their trust and respect for the school team (Turnbull& Turnbull, 2021).

The slightly lower mean for implementation suggests that parents perceive the school's actions to be less consistent than desired. Although this may not always be the case, schools may not consistently implement practices that are as visible to parents. This aligns with previous findings that emphasize the importance of consistent collaborative planning and observable

actions on the part of the school team (Blair et al., 2011; Mueller & Vick, 2019). Such results highlight the importance of involving parents in decision-making and planning, as well as providing visibility of the school's follow-through.

These results indicate an overall positive experience with collaborative practices, particularly in the areas of mutual understanding and shared objectives. While implementation does not trail far behind, results indicate some room for improvement.

Research Question 4

In interviews, parents reported that collaboration was generally strengthened by open communication, trust, and mutual respect, which allowed them to feel heard and valued in the IEP process (Christenson, 2003; Turnbull & Turnbull, 2021). Shared goals, common understanding, shared responsibility, and shared decision-making also support collaboration (Ishimaru, 2011; Mueller & Vick, 2019), though these were mentioned less frequently.

Barriers were not mentioned as often as facilitators, but when shared, could be categorized under the domains of open communication and implementation. Specific to implementation, combative interactions, limited personnel, and insufficient data to inform and guide decisions were mentioned as challenges. When parents perceive lapses in mutual respect or active participation, collaboration can be impacted (Harry et al., 1995; Blair et al., 2011). Schools need to strike a balance between addressing barriers and reinforcing facilitators; when such actions are taken, they can help them establish more meaningful partnerships with families (Christenson, 2003; Griffiths et al., 2021).

Recommendations

Table 51 provides the recommended practices based upon the findings for each of the four research questions.

Table 51

Implication of Findings by Research Question

Research Question	Key Findings	Recommendations	Supporting References
RQ1: Most-valued school-based collaborative practice	Parents desire open communication, shared commitment and understanding, and active participation by all team members.	-Provide structural supports (shared decision-making, implementation) while also attending to relational practices (trust, open communication, mutual respect) -Include parents in all decision-making	Christenson (2003); Epstein (2001); Turnbull & Turnbull (2021); Cowan et al. (2004); Griffiths et al. (2021)
RQ2: Influence of demographics on collaborative practices	Parents' race/ethnicity, student age, and disability category influence their preferred collaborative practices.	-Design engagement strategies to be reflective and mindful of family demographics. -Make shifts in practices as students progress in age. -Maintain a focus on the complexity of student needs in planning.	Harry et al. (1995). Kalyanpur et al. (2000); Trainor (2010); Blair et al. (2011); Mueller & Vick (2019); Griffiths et al. (2021); Turnbull & Turnbull (2021)
RQ3: Parent experiences with collaboration	High ratings for shared goals and understanding; slightly lower for implementation.	-Increase the visibility and consistency of school actions. -Strengthen school follow-through with any devised plans.	Blair et al. (2011); Mueller & Vick (2019); Christenson (2003); Epstein (2001)

Table 50 continued

Research Question	Key Findings	Recommendations	Supporting References
RQ4: Facilitators and barriers to collaboration	Facilitators: open communication, trust, and mutual respect. Barriers: open communication, implementation	-Monitor and address barriers while reinforcing facilitators. -Adjust structural goals and relational approaches to fit the needs of the parents.	Christenson (2003); Griffiths et al. (2021); Harry et al. (1995); Blair et al. (2011)

Schools can enhance their collaborative practices by tailoring their use of relational and structural supports to fit the needs of their families. Demographics and student needs should always be driving factors in how schools' approach and structure collaboration with parents of students receiving special education services.

Limitations

In addition to the limitations identified in Chapter One, additional limitations emerged as the study progressed. The most impactful factor on the results of this study was the small sample size. Of the more than 500 districts in the state of Pennsylvania, only nine gave consent for the study to take place in their district. This limited the overall participation rate and restricted the diversity of participants, each with their own perspectives and experiences to study.

Further impacting the actual representativeness of the results was the sample that participated in the study. Of the 160 who completed the survey, it was determined that they could not be deemed representative of either the state's student population, based on age, or the disability category. The results derived from this sample must be both interpreted and generalized with caution, as they only reflect a small, non-representative sample.

An additional limitation is that the survey is self-selecting, meaning parents choose whether to participate in it (Reja et al., 2013). Those who participated may have had stronger opinions, more varied experiences, or greater flexibility in completing the survey than those who did not, potentially skewing the findings (Reja et al., 2003). The study's findings may not be entirely representative of parents who do not hold extreme opinions, have had a range of experiences, or have the time to participate, thus limiting the generalizability of the results to the larger population of families with students receiving special education services across the state.

Implications for Future Research

The results of this study highlight the value of exploring parental perceptions of school-based collaborative services and can serve as a springboard for further research. A deeper dive into parental experiences across a broader and more diverse population, including families from historically underserved or marginalized communities, could provide greater insight into how collaborative practices are perceived across districts, communities, and cultural backgrounds.

This study found that parents' preferences and perceptions change over time. Longitudinal research could provide insight into how these perceptions evolve as students progress through grade levels or schools and how they may shift in response to the implementation of new school-based collaborative practices.

Future studies might also consider surveying other stakeholders such as teachers, administrators, and specialists. By comparing perspectives across these groups, determinations can be made regarding the alignment or discrepancies between parents and the school's special education team. With a deeper understanding of these differences in perspectives, targeted professional development could take place to develop a greater empathy for what each

stakeholder is experiencing, potentially resulting in strengthened relationships and improved communication.

Further research could also determine the effectiveness of specific collaboration practices, such as digital communication platforms or varying the frequency and length of communications. Experimental designs could measure parent engagement before and after implementation, providing evidence of what practices most effectively support collaboration.

There are many options for future research beyond those listed here, but a common thread connects them all. This commonality is the collection of additional, varied data to develop more consistent, equitable, and valuable collaborative relationships between parents and school teams.

Summary

This study examined parents' perceptions of school-based collaborative practices. Specifically, the value they place on the practices within each of these domains, the frequency at which these practices occur, and the facilitators and barriers that impact collaboration with the school-based team. The value that parents placed on these practices was influenced by demographic factors, including parents' race/ethnicity, student age, and disability category. Parents generally reported positive experiences across the practices of collaboration; a few areas needing improvement were also identified. Schools seeking to maintain or improve upon their collaborative practices should focus on both their structural and relational approaches as they continue to work with parents of students with disabilities. The findings, despite the limitations, provide insight for school districts seeking to improve collaboration and, thus, the academic and post-secondary success of students with disabilities.

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Appendix A

Superintendent Letter

Dear Superintendent,

I am a doctoral student in the Special Education Program at Slippery Rock University, where I am writing my dissertation. This letter serves to inform you of my research study and to request access to your school district to conduct doctoral research. The study will focus on parental perceptions of collaborative practices in special education.

My study will examine parents' perceptions of practices utilized by special education teams when collaborating for the benefit of their school-aged students. I aim to gather information from parents about the current collaborative practices in place and those practices that parents believe are most beneficial, as well as identify the barriers and facilitators of collaboration. The information gathered from this dissertation study will inform current practices and identify areas for professional development to improve school-family collaboration for our students with disabilities.

Slippery Rocks Institutional Review Board will review my study. Part of the review process involves seeking permission from the superintendent to conduct my research. There are no known or anticipated risks from participating in this survey. The study will consist of an anonymous and confidential electronic survey, anticipated to take less than 10 minutes to complete. After completing the survey, participants may volunteer for a follow-up interview to further discuss school-family collaboration.

This research study will be conducted by me under the supervision of my Dissertation Committee Chair, Dr. Ashlea Rineer-Hershey, at a.rineer-hershey@sru.edu. If you need additional information regarding this research project, please contact me at 610-883-0425 or exw1029@sru.edu.

Thank you for considering the district's participation in my doctoral research study. Please complete the following form to inform me of your decision regarding your district's participation.

Erica Wood

Doctoral Candidate, Slippery Rock University

Appendix B

District Approvals Form

I agree to provide doctoral student Erica Wood with an indirect and confidential means to contact the parents/guardians of students receiving special education services in our school district. I have made the decision based on the information I have in the consent request and have had the opportunity to receive any additional details I wanted about the study. I understand I may withdraw this consent at any time by telling the researcher without penalty or negative consequences.

I also understand this project will be reviewed by the Institutional Review Board at Slippery Rock University, and I may contact this office if I have any concerns or comments resulting from our district's involvement in this study.

- o Yes
- o No

District Representative/Contact

To conduct this study, I am requesting that a district representative email the survey to the parents/guardians of students in grades K–12 who are receiving special education services during the 24-25 SY. The responses will remain completely anonymous, and no personally identifiable information will be collected. I will not have access to any parent names or contact information. Participation is entirely voluntary, and parents may choose to remain anonymous unless they choose to participate in an optional interview. Even in the case of an interview, all responses will remain confidential and anonymous.

Once I have received the necessary contact information and IRB approval, I will provide your district representative with the survey for distribution via email.

District Representative/Contact Name

_____

District Representative/Contact Email

_____

Appendix C

IRB Application/Approval)

Slippery Rock University of Pennsylvania
INSTITUTIONAL REVIEW BOARD
104 MALTBY AVENUE, SUITE 005
SLIPPERY ROCK, PA 16057
724-738-4846
irb@sru.edu

July 15, 2025

Dr. Ashlea Rineer-Hershey
Special Education

RE: Protocol Approved
Protocol # 2025-074-88-B
Protocol Title: Parent Perceptions of School-Based Collaborative Practices

Dear Ashlea:

Thank you for your new IRB submission. The Institutional Review Board (IRB) of Slippery Rock University has received and reviewed the above-referenced protocol utilizing the expedited review process. The IRB has approved the protocol under the "expedited" category.

You may begin your project as of June 30, 2025. Your approved protocol will expire on June 29, 2026. You will need to submit a Progress/Final Report at least 7 days prior to the expiration date. Please remember that all research must be conducted as described in the submitted approved materials. If any changes need to be made, a Change to Protocol Form must be submitted to the IRB Office for review and approval. A final report is required upon the closure of your research study. These forms can be on the IRB webpage, https://www.sru.edu/offices/institutional-review-board/how-to-apply-to-the-irb.

We appreciate your conscientious adherence to protecting the rights and welfare of human participants. If you have any questions or concerns, please contact the IRB Office by phone at (724)738-4846 or via e-mail at irb@sru.edu.

Sincerely,

Yvonne Eaton-Stull

Yvonne Eaton-Stull, DSW, LCSW Vice-Chairperson
Institutional Review Board (IRB)

Appendix D

Parent and Guardian Introduction to the Study

Parents and Guardians,

I hope this message finds you well. I am currently conducting research for my dissertation as part of the Special Education Ed.D. program at Slippery Rock University. As parents and guardians of students receiving special education services in [INSERT] School District, you are asked to participate in a brief questionnaire via Google Forms. Your insights regarding current collaborative practices and those you find most valuable will provide valuable perspectives on the collaborative practices used by special education teams to support your students. Permission to conduct this research in your school district has been approved and permitted by your superintendent.

The voluntary survey will take approximately 10 minutes to complete. There are no foreseeable physical or mental risks, aside from the potential for some slight emotional discomfort, associated with participating in my study. However, if you feel uncomfortable with the survey, you may withdraw at any time.

All information you provide during this study will be considered and kept confidential. The data you provide in the survey will be recorded anonymously, and your participation, as well as any additional information you provide, will be held in the strictest confidence by this researcher. Survey and interview responses will not be shared with your child's school district, school personnel, or any third parties. Your name, the name of your student, or your school district will not be included in the published study.

While the study results will be published, the individual participant information will not be included. Instead, the results will be aggregated to identify overarching themes and patterns.

If you have any questions about the purpose, procedures, or survey, email exw109@sru.edu. The Slippery Rock Institutional Review Board (IRB) has reviewed and approved this study. Questions about the participants' rights can be directed to irb@sru.edu or 724-738-4846.

To participate in the Parent Perceptions of School Collaborative Practices Survey, use the link below: Survey

Thank you for considering participating in this research study.

Appendix E

Participant Consent Form

Consent to Participate

You are being invited to participate in a survey designed to explore your experiences and perceptions related to collaboration, as defined above, with your child's school team. After the survey, you can volunteer for an interview over Zoom or via phone to further discuss school-family collaboration.

If you have more than one child receiving special education services and your experiences have varied, you will have the opportunity to submit this survey for your other child(ren).

All information you provide during this study will be considered and kept confidential.

The data you provide in the survey will be recorded anonymously, and your participation, as well as any additional information you provide, will be held in the strictest confidence by this researcher. Survey and interview responses will not be shared with your child's school district, school personnel, or any third parties. Your name, the name of your student, or your school district will not be included in the published study.

Questions about this study are welcome at any time.

Your participation in this study is voluntary, and you may refuse to participate or stop at any time without consequence or prejudice. This survey is designed to take approximately 10 minutes or less.

Questions about this survey are welcome and can be directed to the author of this study via email at sruresearcher@gmail.com or Dr. Ashlea Rineer-Hershey, Dissertation Committee Chair, a.rineer-hershey@sru.edu, with the Department of Special Education, Slippery Rock University.

Any questions about your rights as a research subject may be directed to irb@sru.edu, 724-738-4846.

Checking the "yes" box below indicates that you have read and understand the contents of this consent form and that you agree to take part in this study.

- o Yes
- o No

Appendix F

Survey

Parent/Guardian Demographics

The following demographic questions will provide deeper insight into survey responses.

Please select the boxes that describe your identified race/ethnicity(s):
Check all that apply.

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Multi-Racial
- Native Hawaiian or other Pacific Islander
- White
- Prefer not to answer

You are answering the following questions regarding your student's current (24-25) school year.
How old was your student on December 1, 2024?

- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19+

Under which category did your student receive special education services?

- Autistic/Autism
- Emotional disturbance
- Hearing impairment, including deafness
- Intellectual disability
- Multiple disabilities
- Other health impairment
- Orthopedic impairment
- Specific learning disability
- Speech or language impairment

- Traumatic Brain Injury
- Visual Impairment
- Unsure/Not known

Defining Collaboration

Collaboration between you as parents and the school special education team is essential to your child's current and long-term success. For this study, collaboration has been defined as a shared responsibility and efforts to achieve results (Anderson-Butcher & Ashton, 2004). It is built upon a foundation of relationship building, shared values, and active engagement (Griffiths et al., 2021). Eight key elements, **open communication, trust**, **mutual respect**, **shared goals**, **common understanding**, **shared responsibility**, **active participation**, **shared decision-making, and implementation,** are needed to foster collaboration (Griffiths et al., 2021). This survey will gauge your perceptions of your district's performance in these eight key areas.

Open Communication

Open communication happens when everyone on the team feels comfortable sharing their ideas. This helps reduce disagreements and ensures that everyone has the necessary information to participate fairly (Griffiths et al., 2021).

Select one of the following options that you believe is the most valuable when seeking open communication with your child's special education team.
Mark only one oval.

- Easily understood and honest communication between me and the members of the school team
- Easy and clear ways for me to communicate with the school team
- Open discussions with the school team when in disagreement with something regarding my child's special education services
- Opportunities to share my knowledge (about my child and other topics) and ideas with the school team.

How often have you experienced this with your child's special education team in the past year?
Mark only one per row.

	Never	Rarely	Sometimes	Often	Always
Easily understood and honest communication between me and members of the school team					
Easy and clear ways for me to communicate					

with the school team					
Open discussions with the school team when in disagreement with something regarding my child's special education services					
Opportunities to share my knowledge (about my child and other topics) and ideas with the school team.					

Trust

Trust builds over time through the effort put into good communication and by everyone staying focused on the same goal (Griffiths et al., 2021).

Select one of the following options that you believe to be the most valuable in trusting your child's special education team.

Mark only one oval.

- o Each member of the special education team has my child's best interests in mind
- o The team ensures I understand and am part of the process of planning for my child's special education services
- o The team is open to new ideas and approaches I present to help my child
- o All team members are reliable and consistent when speaking about my child
- o I can share knowledge and ideas with the school team with the belief that I will not be judged

How often have you experienced this with your child's special education team in the past year?

Mark only one per row.

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Each member of the special education team has my child's					

best interests in mind					
The team ensures I understand and am part of the process of planning for my child's special education services					
The team is open to new ideas and approaches I present to help my child					
All team members are reliable and consistent when speaking about my child					
I can share knowledge and ideas with the school team with the belief that I will not be judged					

Mutual Respect

Mutual respect happens when team members appreciate the knowledge, skills, and strengths that others contribute to the group (Griffiths et al., 2021).

Select one of the following options that you believe to be the most valuable in establishing mutual respect with your child's special education team.
Mark only one oval.

- o My family's cultural background and educational experiences are acknowledged and understood by the team
- o Compromise, when needed, takes place due to team members' flexibility and responsiveness to feedback
- o Conflict between myself and team member(s) is addressed in a constructive and timely manner
- o The school team is capable of meeting my child's needs
- o The school team values my input and treats me as a team member

How often have you experienced this with your child's special education team in the past year?
Mark only one per row.

	Never	Rarely	Sometimes	Often	Always
My family's cultural background and educational experiences are acknowledged and understood by the team					
Compromise, when needed, takes place due to team members' flexibility and responsiveness to feedback					
Conflict between myself and team member(s) is addressed in a constructive and timely manner					

The school team is capable of meeting my child's needs					
The school team values my input and treats me as a team member					

Shared Goals

Shared goals are created when everyone on the team gives their input about the goal(s) they are working toward together.

Select one of the following options that you believe is the most valuable for developing shared goals with your child's special education team.

Mark only one oval.

- o Goals are mutually created and agreed upon by all team members, including myself as the parent
- o My input in creating goals is valued
- o The entire team works together toward helping my child reach their goals

How often have you experienced this with your child's special education team in the past year?

Mark only one per row.

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Goals are mutually created and agreed upon by all team members, including myself as the parent					
My input in creating goals is valued					
The entire team works together toward helping my					

child reach their goals					

Common Understanding

Common understanding happens when all team members, no matter their background, experience, or skills, are united in working toward the same goal (Griffiths et al., 2021).

Select one of the following options that you believe to be the most valuable in establishing a common understanding with your child's special education team.

Mark only one oval.

- School team members are receptive to each other's contributions, including mine as the parent
- Each team member's role is clear and purposeful to my child's special education programming
- The school team, including me, values the role of each member of the team
- The school team and I are aligned with what is best for my child

How often have you experienced this with your child's special education team in the past year?

Mark only one per row.

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
School team members are receptive to each other's contributions, including mine as the parent					
Each team member's role is clear and purposeful to my child's special education programming					
The school team, including me, values the role of each member of the team					

The school team and I are aligned with what is best for my child					

Shared Responsibility
Shared responsibility happens when team members use their skills to help create and stick to their role in finding a solution (Griffiths et al., 2021).

Select one of the following options that you believe to be the most valuable in establishing shared responsibility with your child's special education team.
Mark only one oval.

- o Each team member accepts and performs their role in my child's special education plan
- o I was made aware of skills and resources that each team member brings to the collaboration
- o All team members are truly committed to the process

How often have you experienced this with your child's special education team in the past year?
Mark only one per row.

	Never	Rarely	Sometimes	Often	Always
Each team member accepts and performs their role in my child's special education plan					
I was made aware of skills and resources that each team member brings to the collaboration					
All team members are truly committed to the process					

Active Participation
Active participation happens when team members fully take on their roles and contribute useful ideas and resources (Griffiths et al., 2021).

Select one of the following options that you believe to be the most valuable for active participation with your child's special education team.
Mark only one oval.

- o All team members contribute different and valuable resources toward achieving the creation of my child's special education services

- Leaders are actively involved in creating change or working toward helping my child together with the team, myself included
- All members are actively engaged in the process

How often have you experienced this with your child's special education team in the past year?
Mark only one per row.

	Never	Rarely	Sometimes	Often	Always
All team members contribute different and valuable resources toward achieving the creation of my child's special education services					
Leaders are actively involved in creating change or working toward helping my child together with the team, myself included					
All members are actively engaged in the process					

Shared Decision Making
Shared decision-making happens when everyone on the team gives input, and decisions are made together about the plan to move forward (Griffiths et al., 2021).

Select one of the following options that you believe is the most valuable for shared decision-making with your child's special education team.
Mark only one oval.

- Myself and all team members are encouraged to provide input in the decision-making process
- All team members participate in the decision-making process
- I am aware of and understand the process for making decisions and implementing actions regarding my child's special education services

How often have you experienced this with your child's special education team in the past year?
Mark only one per row.

	Never	Rarely	Sometimes	Often	Always
Myself and all team members are					

encouraged to provide input in the decision-making process					
All team members participate in the decision-making process					
I am aware of and understand the process for making decisions and implementing actions regarding my child's special education services					

Implementation

Implementation happens when the agreed-upon solutions are put into action and carried out properly (Griffiths et al., 2021).

Choose one of the following options that you believe to be the most valuable to the implementation of your child's special education programming.

Mark only one oval.

- Each member follows through with his or her role in the implementation of my child's special education services
- Team members continue to communicate with me during the implementation of my child's special education services
- My child's performance is continually evaluated for effectiveness using a data-collection process
- If the chosen interventions are not effective for my child, I am informed promptly and the team reconvenes

How often have you experienced this with your child's special education team in the past year?

Mark only one per row.

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Each member follows through with his or her role in the implementation of my child's special education services					
Team members continue to					

communicate with me during the implementation of my child's special education services					
My child's performance is continually evaluated for effectiveness using a data-collection process					
If the chosen interventions are not effective for my child, I am informed promptly and the team reconvenes					

Are you willing to participate in a voluntary interview to take place virtually or over the phone?

- Yes
- No

Interview Contact Form

Please follow this link to submit your contact information if you are willing to participate in a voluntary interview to be held over the phone or virtually. Survey Link

Appendix G

Parent/Guardian Interview Consent Form

As a participant in this study, you have indicated a willingness to participate in a short, virtual interview. Your participation is voluntary and will take approximately 15 minutes of your time. All information you provide during this interview will be considered and kept confidential. Interview responses will not be shared with your child's school district, school personnel, or any third parties. Your name, the name of your student, or your school district will not be included in the published study.

We will record your interview as part of this study, and you will receive a copy.

Please respond to the following statements to provide your consent for participation in the interview.

I have been informed of the purpose of this study and have had an opportunity to ask questions or voice concerns regarding my participation.

- o Yes
- o No

The audio recording can be studied by the researcher for use in the project.

- o Yes
- o No

I have read the above description and provide my consent for participation in and use of the recording of the interview.

- o Yes
- o No

Name:

Date:

As a reminder, if you have any questions or concerns resulting from your participation in this study, please contact irb@sru.edu, 724-738-4846.

Thank you for your participation in this project.

Erica Wood (exw1029@sru.edu)

Appendix H

Parent/Guardian Interview Questions

1. Student Age as of December 1, 2024:
2. Student Disability Category:
3. Student Race/Ethnicity:
4. What factors have facilitated collaboration with your student's special education team regarding:
    a. Open communication?
    b. Trust?
    c. Mutual respect?
    d. Shared goals?
    e. Common understanding?
    f. Shared responsibility?
    g. Active participation?
    h. Shared decision making?
    i. Implementation?
5. What barriers have you faced when trying to collaborate with your student's special education team regarding:
    a. Open communication?
    b. Trust?
    c. Mutual respect?
    d. Shared goals?
    e. Common understanding?
    f. Shared responsibility?
    g. Active participation?
    h. Shared decision making?
    i. Implementation?
6. What else can the school be doing to make collaboration easier for you and your student's special education team?