Parent Engagement Among Families of Youth with Disabilities During the COVID-19 Pandemic: A Qualitative Study

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Abstract

In this qualitative study, we explored the perceived facilitators and barriers of school-based engagement among parents of youth with disabilities during the COVID-19 pandemic. Drawing from 642 open-ended responses collected via a national survey during January to February of 2021, we employed a thematic analysis to examine how parents navigated engagement under disrupted educational services. Four overarching themes emerged: school-based factors, family and contextual factors, systemic influences, and digital access and equity. Findings revealed that some parents experienced increased collaboration and responsiveness from schools, whereas others reported exacerbated barriers due to limited technological access, inadequate educator preparedness, and logistical constraints. Implications included the need for school systems to adopt culturally responsive practices, enhance parent-teacher communication infrastructure, and invest in digital equity and training. Findings contribute to our understanding of parent-school partnerships in crisis contexts and offer directions for future inclusive engagement strategies.

Introduction

Youth or transition-age youth, typically defined as individuals between the ages of 14 and 22, are navigating a pivotal developmental and educational period. For youth with disabilities, this stage involves academic planning and preparation for future employment, independent living, and postsecondary education. Unlike their peers without disabilities who often exit school by age 18, youth with disabilities receiving special education services may remain in school until age 21 or 22. During this extended transition period, parents play a critical role in coordinating transition plans, connecting with adult service agencies, and advocating for inclusive community opportunities. Decades of research have shown that effective parent engagement during the transition years is associated with improved in-school and postschool outcomes for their youth with disabilities (Fan & Chen, 2001; Mazzotti et al., 2021). One of the key benefits of such engagement is its positive influence on the development of self-determination, an ability to make choices, set goals, and take control of one's own life, which is also a foundational skill for a successful transition to adulthood and independent living (Hirano & Rowe, 2016; Lindstrom et al., 2007; Shogren et al., 2018; Wehmeyer & Schalock, 2001). Despite these benefits, educators and professionals often continue to struggle with meaningfully engaging families during the transition

process (Hirano et al., 2018). These difficulties stem from a variety of factors, and these factors can be further compounded by large-scale disruptions, such as the COVID-19 pandemic.

The COVID-19 pandemic sharply disrupted school-based parent engagement, creating unprecedented shifts in how families connected with educators, accessed services, and supported their children's education (Sonnenschein et al., 2021). Although the acute phase of the pandemic has subsided, the disruptions it caused continue to shape education systems today. Hybrid and remote learning models, expanded use of digital communication, and widened disparities in access have reshaped the landscape of school-family collaboration. These changes underscore the need to understand not only how parent engagement was affected during the crisis but also what long-term strategies may be needed to sustain meaningful partnerships in future educational disruptions or emergencies (Jones & Palikara, 2023).

Although several studies have explored school or teacher perspectives during the pandemic, there remains a critical gap in capturing the voices of parents—particularly those of youth with disabilities—about the facilitators and barriers to parent engagement they encountered during this time. Parent experiences during periods of crisis are essential to informing equity-driven approaches to school-family partnerships. For families of youth with disabilities, engagement is often compounded by unique challenges, such as managing individualized education programs (IEPs), navigating services, and balancing additional caregiving responsibilities.

Theoretical Frameworks

This study was grounded in Bronfenbrenner's ecological systems theory (1979) is a developmental framework that explains how an individual's growth and behavior are influenced by multiple layers of interacting environmental systems. These include the microsystem (immediate settings like family, school, and peers), mesosystem (connections between microsystems, such as home–school relationships), exosystem (indirect influences like parents' workplaces or school policies), macrosystem (broader cultural values, societal norms, and laws), and the chronosystem (changes over time, including life transitions and historical events). This theory emphasizes that development is shaped not just by individual factors, but also by dynamic interactions within and across these nested systems. Bronfenbrenner's ecological systems theory highlights the multiple environmental systems that influence individual behavior. This theory helps situate parent engagement within broader societal, policy, and institutional contexts, which offers an essential lens given the systemic disruptions caused by the pandemic. For example, school closures, healthcare access disparities, and digital inequities all reflect the interaction of mesosystem and exosystem influences on parental engagement.

Parent Engagement

Parents of children and youth with disabilities are consistently identified as key contributors to their children's academic, behavioral, and postschool success (Fan & Chen, 2001; Henderson & Mapp, 2002; Jeynes, 2005, 2007; Pomerantz et al., 2007). As caregivers, educators, and advocates, parents support skill development and decision-making across home, school, and community settings (Lindstrom et al., 2007). Prior studies have linked parent engagement to positive educational outcomes, including increased classroom participation (Hughes & Kwok, 2007; Hibbard et al., 2005), improved academic achievement, and better social and emotional functioning (Izzo et al., 1999). In the context of secondary transition, parent involvement is especially critical. It has been shown to predict improved postschool outcomes such as employment, community participation, and independent living for students with disabilities

(Mazzotti et al., 2021). The Taxonomy for Transition 2.0 (Kohler et al., 2016) highlights parent engagement as central to effective transition planning and service coordination.

Facilitators of Parent Engagement

Research on parent engagement prior to and during the COVID-19 pandemic has identified several key facilitators that support meaningful involvement, especially for families of students with disabilities. Studies conducted before the pandemic emphasized the importance of school practices such as two-way communication, cultural responsiveness, and shared decision-making (Henderson & Mapp, 2002; Turnbull et al., 2015). In their conceptual model, Hirano and Rowe (2016) identified school values, intervention supports, and expanded parent roles as key components of effective engagement in secondary education. Their work highlighted that when school staff hold high expectations, provide targeted supports, and recognize parents as collaborators, parent engagement increases. This model informed our approach to coding parent responses related to school-based practices and beliefs about family-school partnerships. During the pandemic, some families reported enhanced engagement due to flexible scheduling, increased digital communication, and educators who demonstrated empathy and responsiveness (Martinez et al., 2023; Tye, 2023). For example, Martinez et al. used qualitative interviews with parents of students with disabilities (N=27) and found that virtual IEP meetings improved access for working parents. These facilitators could be especially beneficial when paired with technological support and follow-up communication from school staff. Such studies informed our survey design, which included open-ended questions about what supported parent engagement during remote or hybrid learning periods. However, much of the existing literature does not focus specifically on transition-age youth or examine how engagement facilitators may vary across developmental stages or educational contexts.

Barriers to Parent Engagement

Barriers to parent engagement have long been documented in the literature, particularly for families of students with disabilities. Prior to the pandemic, studies noted logistical challenges (e.g., work schedules, transportation), limited teacher outreach, and cultural mismatch between schools and families as persistent obstacles (Hirano et al., 2018; Povenmire-Kirk et al., 2010). In a qualitative meta-synthesis, Hirano et al. reviewed 20 studies and identified barriers at the family level (e.g., stress, time), school level (e.g., lack of inclusive climate), and systems level (e.g., fragmented adult services). These findings align with Bronfenbrenner's ecological systems theory, which suggests that engagement is shaped by multilevel interactions across home, school, and broader policy environments. The COVID-19 pandemic introduced or intensified many of these barriers. Parents of students with disabilities reported confusion over rapidly changing expectations, limited access to transition-related services, and difficulty navigating online platforms (Sonnenschein et al., 2021; Hartas, 2024). In a survey study of 832 families, Sonnenschein et al. found that parents experienced increased stress due to the dual demands of caregiving and at-home instruction. Parents from historically marginalized communities faced compounded challenges related to digital inequities, including lack of internet access and limited digital literacy (Eccles & Harold, 1993; Lareau, 2003). These studies provided important background for our analysis of parent-reported barriers in open-ended survey responses. However, most prior work does not isolate the specific experiences of parents of transition-age youth, whose engagement needs differ from those of families with younger children. For example, barriers to

collaboration on postsecondary planning, vocational readiness, or adult service coordination are often more complex and time-sensitive.

To bridge the study gap built on this context, this study aimed to explore how parents of youth with disabilities experienced school-based engagement during the COVID-19 pandemic. Through a qualitative examination of parent narratives, we aimed to identify both facilitators and barriers of engagement during this unprecedented time. Specifically, we sought to answer two research questions: 1) What are the facilitators of parent engagement for parents of youth with disabilities during the COVID-19 pandemic? 2) What are the barriers to parent engagement for parents of youth with disabilities during the COVID-19 pandemic?

Method

Research Design

This study was part of a larger study, which aimed to a) explore how parents of youth with disabilities have been exposed to school-based parent engagement practices in secondary transition; b) understand parents' perceptions on the school-based parent engagement practices in secondary transition; and c) identify the relationships between parents' cultural background (e.g., race, ethnicity, gender), and d) parents' perceptions of school-based parent engagement practices (Chang et al., 2021). For the larger study, we developed and conducted a cross-sectional survey study. The survey included 26 demographic questions (two COVID-19 related multiple-choice questions), 23 6-point Likert scale questions related to school-based parent engagement strategy, and three open-ended questions.

For this study, we aimed to present our findings on the last study aim d), which was parents' perceptions of school-based parent engagement practices in secondary transition during the pandemic. We applied a qualitative study approach (Creswell & Creswell, 2018) to answer our research question. The qualitative study approach is used for exploring participants' lived experiences, meanings, and perspectives in depth. Specifically, we conducted a thematic analysis of responses to two open-ended survey questions, allowing us to capture the complexity and nuance of parent engagement experiences during a time of widespread educational disruption. Unlike quantitative methods that rely on predefined categories, this qualitative approach allowed us to surface unanticipated insights and understand the contextual and emotional dimensions of parents' experiences. This method aligned with the study's goals by providing rich, detailed data on the multifaceted barriers and facilitators to engagement that may not be fully captured through structured response formats.

Participants

After receiving approval from the Institutional Review Board, we administered an online survey using nonprobability, snowball sampling (Baker et al., 2013) from January 6 to February 6, 2021. To recruit participants, the first author posted recruitment flyers on social media (i.e., Facebook and Twitter) via the National Parent Center on Transition and Employment, Parent Training and Information Centers, and private parent support groups. All recruitment materials were in English. Eligible participants must a) live in the United States and b) have a child between 14–21 years old (at the time of survey administration) with an active individualized education program who was receiving special education services in the United States at the time of the study. In the survey, we broadly defined a parent as "a natural, adoptive, or foster parent of a child, a guardian, or an individual acting in the place of a natural or adoptive parent (including a

grandparent, stepparent, or other relatives) with whom the child lives, or an individual who is legally responsible for the child's welfare" (Individuals with Disability Education Act [IDEA], 2004; Sec. 602). All participants completed a consent form before they started the survey. Each eligible participant who completed the survey was invited to enter a random drawing for a chance to receive one of five $100 Amazon gift cards.

We collected survey data from 1,420 participants; 778 participants were excluded due to disagreeing to start the survey, ineligible data (n = 120; i.e., not living in the United States, not having a child with disabilities between 14 and 21 years old), incomplete data (n = 212; survey completion rate <75%), and/or duplicated responses with the same IP address (n = 440). The final analysis included responses from 642 parents of youth with disabilities ages between 14 to 21 years old. These parents who responded to at least one of the three open-ended questions, which formed the basis for our qualitative analysis. Of these 642 participants, 312 also completed the demographic section of the survey. Based on the 312 participants' demographic information, the majority of parent participants identified themselves as non-Hispanic White (48.6%; see Table 1), married (88.0%), aged between 35 and 44 (55.6%), with college, associate, or bachelor's degree (70.4%), and with a household income per year between $50,000–$79,999 (31.0%). The percentage of female and male participants were represented evenly in the sample (50.0% and 49.8%, respectively). We also compared our sample's demographic data with data from two nationally representative studies (i.e., National Longitudinal Transition Study 2012 and U.S. Census 2020). Specifically, participants in our study had higher household annual income than those in NLTS 2012, but were similar to the participants in the U.S. Census 2020 (Chang et al., 2021).

Table 1.

Parents' Demographics across Four Major Race/Ethnicity Categories (N = 642)

Variables	Total participants $n = 312$ (49%)	Parents who responded to any of the three open-ended questions $n = 51$ (8%)	Parents who responded to COVID-19 survey questions $n = 202$ (31%)
Gender			
Female	165 (53%)	30 (59%)	83 (41%)
Male	147 (47%)	21 (41%)	120 (59%)
Marital status			
Married	284 (91%)	38 (75%)	186 (92%)
Divorced	11 (4%)	7 (14%)	6 (3%)
Widowed	5 (2%)	2 (4%)	7 (3%)
Separated	5 (2%)	2 (4%)	1 (1%)
Never married	4 (1%)	1 (2%)	2 (1%)
Age			
18-24	5 (2%)	3 (6%)	6 (3%)
25-29	20 (6%)	7 (14%)	18 (9%)
30-34	35 (11%)	10 (20%)	25 (12%)
35-44	174 (56%)	20 (39%)	132 (65%)
≥45	77 (25%)	11 (22%)	20 (10%)
Household per year income			
<$15,000	5 (2%)	0 (0%)	3 (2%)

$15,000-29,999	17 (5%)	6 (12%)	22 (11%)
$30,000-49,999	69 (22%)	16 (31%)	43 (21%)
$50,000-79,999	102 (33%)	18 (35%)	65 (32%)
$80,000-129,999	94 (30%)	8 (16%)	61 (30%)
≥$130,000	18 (6%)	3 (6%)	8 (4%)
Highest education degree attained			
Less than a high school diploma	8 (3%)	1 (2%)	16 (8%)
High school diploma or equivalency (GED)	11 (4%)	5 (10%)	14 (7%)
College, associate, bachelor's degree	224 (72%)	38 (76%)	139 (69%)
Master's degree	53 (17%)	4 (8%)	27 (13%)
Professional (MD, JD, DDS, etc.)	8 (3%)	2 (4%)	3 (2%)
Doctorate (PhD, EdD)	5 (2%)	1 (2%)	4 (2%)

Note. For some variables, the percentage does not add up to 100% due to missing data.

Survey Instrument

In this study, we used the survey from Chang et al. (2021), see Appendix A. The survey consisted of three sections (i.e., 26 demographic questions, 23 school-based parent engagement strategy Likert scale questions, and three open-ended questions). The survey items were developed based on existing comparable survey instruments, including Quality Indicators of Exemplary Transition Program Needs Assessment (QI-2), Hoover-Dempsey and Sandler (2005) survey, Epstein et al. (2019) School-community Partnerships Model, Turnbull et al.'s (2015) Seven Principles of Partnership Framework, National Longitudinal Transition Study-2 (NLTS2), and the 2020 U.S. Census. The survey instrument underwent expert review and pilot testing to ensure content validity. For this study, we examined the 26 demographic questions and three open-ended questions (i.e., What barriers could you identify that may prevent you from engaging in your child's school activities? What are other strategies that are not listed above but you think are helpful for engaging you in your child's educational/school activities? Is there anything else you would like to tell us about your experiences with school-based parent engagement strategies?) to solicit parents' responses on strategies they found useful, barriers that prevented them from engaging in their child's school activities, and any final thoughts about their experiences with school-based parent engagement strategies.

Data Analysis

We used a qualitative analysis to help us better understand why the parents perceived there was or was no change in their engagement before and during COVID-19. In addressing our research question, "What are the facilitators and barriers to parent engagement for parents of youth with disabilities during the COVID-19 pandemic?," we aimed to a) identify and deepen our understanding of parents' perceptions of any barriers and facilitators for engaging in school-based activities during the COVID-19 pandemic and b) to understand the factors that the parents felt there was more, no, or less change in engagement through identifying repeated patterns of meaning across the responses. We coded a total of 642 responses to the three open-ended questions using a thematic analysis (Braun & Clarke, 2019; Miles et al., 2014). The responses to the three open-ended questions were first individually coded using a combination of inductive and deductive approaches. Deductive codes were initially drawn from existing parent engagement literature and

Bronfenbrenner's ecological systems theory. Inductive codes were developed as new patterns emerged through repeated reading. For our inductive approach, we followed the four main iterative steps below: a) preparation of the coders, b) data organization, c) inductive analysis, and d) theme generation (Braun & Clarke, 2019).

After coding, responses across all three open-ended questions were grouped into common categories regardless of which specific question the content originated from. This cross-question grouping allowed us to capture patterns that cut across parent perceptions of both barriers and facilitators, aligned with ecological levels (e.g., microsystem, exosystem), and were used to structure theme development.

Specifically, the first and third authors first read related literature about the study focus to identify deductive codes. Next, they reviewed the raw data several times prior to coding, identified ineligible survey responses, and documented any preliminary themes. They also identified initial codes and organized them into a codebook, coded the raw data, and updated codes as secondary codes and codebooks as needed (e.g., when both coders agreed one code might be separated from or merged into another code; see Table 2). To ensure rigor in our qualitative analysis, we used the most updated version of our codebook to conduct thorough and mutually exclusive coding of the data. The two coders engaged in an iterative process of reviewing data, refining the codebook, and reapplying codes. Through this process, we developed eight successive versions of the codebook, ultimately finalizing Codebook 8, which included 13 distinct codes (see Table 3). Using Codebook 8, both coders applied the codes to the full dataset in NVivo 12. The coded data were then grouped into broader categories based on shared characteristics, which informed the development of the study's four final themes. These themes reflect the core categories of barriers and facilitators reported by parents and directly answer the study's two research questions. See Figure 1 for an overview of the qualitative coding procedures.

Table 2.

Example Layout of Initial Coding

Quote	Initial codes	Definition	Secondary codes	Definition
"Teachers don't care about my children."	Teacher enthusiasm or lack of	Teachers show they care about their students through knowing their students, helping with their behaviors, and informing parents about their children's status in school.	Teacher/ school shows care	Teachers show they care about their students through their behaviors.
"I hope the teacher can have patience to communicate and timely feedback to the parents."	Teacher is patient toward the student/family	Teachers take time to understand the student/family, wait for their thoughts/responses when needed.		
"On the way of school reform, the value orientation, strategy mechanism, team progress, learning scene, discipline and learning style are the key factors"	School/teacher exhibits racism/discrimination OR shows cultural competency	When school staff do not consider family values in transition planning, they allow dominant cultural values to drive transition planning and give the message that parent involvement is not valued.		

"Just an invitation or even an opportunity to give advice or opinions on what I think would work well with my child."	Teacher invitations	Teachers ask parents to attend school events/meetings, ask for parents' opinions about their children's goals, ask parents to talk about children's future plans, ask parents to help children work toward their transition goals.		

Table 3.

Codebook 8

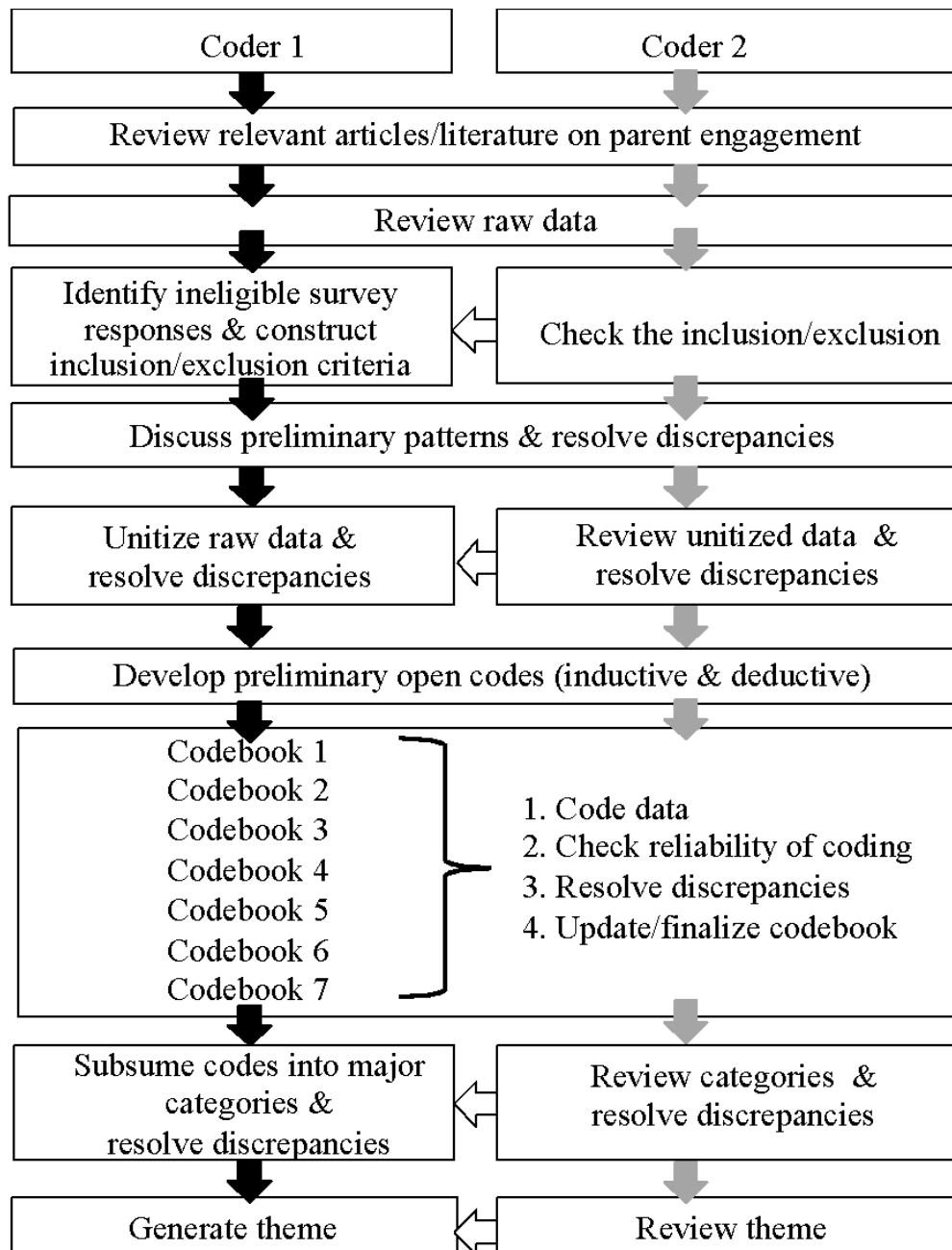| #	Code	Definition
1	Teacher/school shows care	Teachers show they care about their students through their behaviors
2	School/teacher provides support or empowers parents & students	Teacher provides any form of supports toward students and parents
3	School provides (accommodated) activities/events/curriculum-physical settings	School/teacher provides various activities that accommodate students' needs, preferences, and strengths to involve students and families
4	School/teacher prepares the transition process	School/teacher collaborate with family and other service providers/agencies relate to transition programs (internally & externally)
5	Family's knowledge, belief & cultural capital (cultural related)	Family's expectations/belief/emotions regarding their children's future and toward their own roles as parents.
6	School/teacher provides support or empowers parents & students	Teacher provides support toward the students and parents, including accommodations/modifications, emotional, mental, and resources support
7	Technology used	The current educational environment utilizes technology to support student engagement/activities
8	Children-centered	When conducting meetings/events or developing plans/interventions, teachers/schools respect or take students' preferences, interests, strengths, and/or needs into consideration
9	Children's disability/characteristics	Children's mental or physical challenges have a negative impact on parents' engagement
10	Children's interactions/ relationships with their family/parents	School provides any form of support that improves the interactions between children & family/parents
11	Family's stress of daily living	Family's responsibilities, situations of limited resources, disabilities
12	Covid-19	The current educational environment has been restricted by the Covid-19
13	Weather factors	Weather-related factors that impact parental educational engagement

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│      Review relevant articles/literature on parent engagement │
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│   Identify ineligible survey │    │                         │
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│      Discuss preliminary patterns & resolve discrepancies   │
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│   Unitize raw data &     │◄───────│  Review unitized data &  │
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│      Develop preliminary open codes (inductive & deductive) │
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│   Codebook 1                                                │
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│   Codebook 3          ⎫   1. Code data                      │
│   Codebook 4          ⎬   2. Check reliability of coding    │
│   Codebook 5          ⎭   3. Resolve discrepancies          │
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Figure 1. Qualitative Coding Procedure

Trustworthiness

To enhance the trustworthiness of the study, we employed multiple strategies consistent with recommended practices in qualitative educational research (Brantlinger et al., 2005; Trainor & Graue, 2014). First, we maintained an audit trail throughout the research process by documenting methodological decisions, codebook revisions, and analytic memos. This process allowed for transparency in how interpretations and themes were developed and refined. Reflexivity was also central to our approach. The first and third authors engaged in ongoing discussions about their positionalities as researchers with professional and personal experiences in special education.

These reflections informed both the development of the codebook and the interpretation of parent narratives, helping to minimize potential bias and increase analytical clarity. To ensure credibility, we employed collaborative coding and peer debriefing procedures. After independently coding a subset of data, the two coders compared their applications of codes and discussed discrepancies until consensus was reached. The final inter-coder agreement was 84%, indicating substantial alignment in interpretations. Finally, we promoted transferability by providing thick descriptions and representative quotes in the results section. We have applied triangulation through three strategies: 1) examining convergence and divergence across the three open-ended survey questions, 2) comparing coded responses across different demographic subgroups where data were available, and 3) reviewing how the themes mapped onto the ecological systems framework.These examples were selected to illustrate the depth and diversity of parent perspectives and to support readers in assessing the applicability of findings across contexts.

Results

Although facilitators and barriers can be viewed as distinct categories, repeated review of our data revealed that both could be understood through a shared framework—representing two perspectives on the same underlying dimensions of parent engagement. To address our research question, "What are the facilitators and barriers to parent engagement for parents of youth with disabilities during the COVID-19 pandemic? ," we conducted a thematic analysis of open-ended responses from 642 parents. This analysis produced four overarching themes related to school-based engagement during the pandemic: a) school-based factors, b) family and contextual factors, c) systemic influences, and d) digital access and equity (see Table 4 for definitions, associated codes, and illustrative quotes). These themes reflect the multi-level dynamics that shaped how parents perceived their ability to engage with schools during a time of significant educational disruption.

Table 4.

Themes, Definitions, Codes, and Example Quotes

#	Theme	Definition	Codes	Example Quotes
1	School-based Facilitators and Barriers	Parents' concerns and hopes that are related to what teachers/schools could or should do to improve parent engagement for parents of youth with disabilities.	• Teacher/school shows care • School/teacher provides support or empowers parents & students • School provides (accommodated) activities/events/curriculum-physical settings • School/teacher prepares the transition process	"I see that the teachers were very committed to working with my child, however they did not have the training necessary to provide more support in helping me identify and access supports after my child graduated from HS [high school]." "Just an invitation or even an opportunity to give advice or opinions on what I think would work well with my child."
2	Family and Contextual Facilitators and Barriers	Parents' concerns and hopes that are related to what parents believe a parent could/should do to improve their school involvement/engagement.	• Family's knowledge, belief & cultural capital (cultural related)	"Parents should also communicate with school teachers about their children's recent situations." "Parent engagement requires not only parents' motivation, but also, maybe more importantly,

				parents' engaging ability. With high motivation and low capability, many school educational activities are not appropriate for parents to participate in."
3	System-based Facilitators and Barriers	Parents' concerns and hopes that are related to what parents believe system or policy makers could do to improve parent engagement.	• School/teacher provides support or empowers parents & students • Technology used • Children-centered	"Administrators who do not provide support to teacher or require her to improve and use such strategies" "School districts have to put more time and effort into coming up with different strategies as things are always changing for families (e.g., schedules, finances, housing, health, etc.). Strategies that may be good [to]may not be good the next school year. Families should be surveyed often due to changing commitments, lifestyles, etc."
4	Predisposing Situations (e.g., Digital Access and Equity)	Parents' concerns related to their current situations that could affect parent engagement.	• Children's disability/characteristics • Children's interactions/relationships with their family/parents • Family's stress of daily living • Covid-19 • Weather factors	"I work outside of the home from 8a-430p. It has always been difficult for me to participate in meetings and other school activities d/t [due to] my work hours. I am willing to do so, but I have always received resistance when I've asked to meet outside of the school day. I always have to use vacation time or non-paid work time to go to a meeting at school or participate in anything." "The biggest [parent engagement] impact comes from the child itself. We always feel that when we face him."

Theme 1: School-Based Factors

Parents reported concerns and hopes that were related to what teachers/schools could or should do to improve parent engagement for parents of youth with disabilities. This theme has the most quotes and descriptions compared to the other three themes because most of parent responses were related to how and what could be done better from the school side. Under this theme, we further identified five subthemes (Table 5), namely knowledge and skills, culturally responsive practice, communication, collaboration, relationship.

Table 5.

Subtheme of School-based Facilitators and Barriers and Its Subthemes

Theme	Subtheme	Definition
School-based Facilitators and Barriers	Knowledge & skills	This subtheme includes positive or negative comments about schools/teachers' knowledge, professionals' skills, or any activities/events that could improve students' positive behaviors/emotion/academic outcomes or to support parents assisting their children across settings.
	Communication	This subtheme includes positive or negative comments about how communication takes place between teachers/schools, students, agencies, and parents across different platforms and frequency. Communication includes expressing (i.e., words and impression), listening, and timely responses.
	Collaboration.	This subtheme includes positive or negative comments about how two or more parties/stakeholders work toward the same or similar goal(s) collaboratively or different stakeholders connect to learn from each other's experiences/expertise.
	Relationship	This subtheme includes positive or negative comments about the past working experiences toward the teachers/schools. Survey respondents reported being cared by the teachers/schools or have trust in the behavior of the teachers/schools, under a certain or an uncertain circumstance.
	Culturally responsiveness	This subtheme includes positive or negative comments about teachers/schools identifying and value survey respondents' cultural, experience, perceptions. This could include, schools provide a judgmental-free, welcoming environment for parents to share their thoughts freely, teachers encourage parents to share more about their children, teachers aware of their speaking tone/cloth.

In the area of knowledge and skills, parents emphasized the needs of teachers/schools to provide more and timely information on supporting their children across settings and throughout the transition stages. Specifically, for youth with disabilities in secondary transition, parents indicated insufficient knowledge and skills related to their children's future options. Parent 640 reported,

> My son is in his senior year and I still have no idea what our next step is going to be. I am pretty much given one option as far as a transition program and I don't especially care for that option. Parents should have choices and I don't feel that I have been given many. I am pretty much on my own in deciding our next step.

In addition, parents reported their concerns and suggestions about insufficient teacher training/preparation in supporting the students and/or assisting parents. For instance, Parent 90 reported, "I see that the teachers were very committed to working with my child, however, they did not have the training necessary to provide more support in helping me identify and access supports after my child graduated from HS [high school]." To address these concerns, Parent 2 suggested schools provide teachers with training on student transition support. For teacher preparation for youth in transition, Parent 425 suggested that teachers should apply students' daily life and interests into the class curriculum, and should guide students to think and solve problems.

In the area of adopting culturally responsive practice, parents reported perceptions toward school and their own cultures. Specifically, this subtheme included schools/teachers a) providing a judgmental-free and welcoming environment for parents to share their thoughts freely, b) encouraging parents to share information and perceptions about their children, and c) being aware of and justifying their speaking tone and appearances. Parents reported the school environment can be one barrier to parents' participation. Parent 372 shared a concern about their school environment that the cultural differences between parents and professionals will guide students to different focus.

In the area of communication, parents identified the importance and frequency of communication that takes place between teachers/schools, students, agencies, and parents across different platforms. Communication includes expressing (i.e., words and impressions), listening, and timely responses. Parents believed having clear communication means timely responses about their children that are also free of technical terms. To improve effective communication, Parent 617 indicated the importance of "constant communication, even a simple email."

During COVID, parents' perceptions toward their school engagement changed due to the modifications in students' learning settings, which also affected school-parent communication. For instance, Parent 97 indicated,

> Since the pandemic started, I have found the school to be extremely responsive and helpful in terms of making plans for his [my son's] education, supporting my decisions regarding live vs. remote attendance, and keeping me informed. However, I will say that before we went on lockdown, there was very little communication from the school about anything.

In the area of collaboration, parents reported the importance of parents, schools, students, and other stakeholders working toward the same or similar goal(s) collaboratively, as well as different stakeholders making connections to learn from each other's experiences and expertise. Inviting parents to join an educational activity can be the first step to collaborating with parents. Parent 624 said it could be, "just an invitation or even an opportunity to give advice or opinions on what I think would work well with my child." Collaborating with students and the community can be equally important. Parent 634 indicated the need of "having the school [be] engaged with the community and encouraging the students' regular involvement in community activities." Parents from different states suggested schools develop communication platforms, such as online discussion boards, phone calls, or video visits, to discuss students' situations at schools.

Finally, in the area of relationships, parents' perceptions indicated that they valued parent-teacher relationships. Parent 368 pointed out that "teachers and parents establish a cooperative relationship of mutual trust and coordination in educational activities, which is conducive to the formation of home cooperation atmosphere." To build up a genuine relationship between schools and parents, Parent 600 indicated they "could help educators if they would truly accept their involvement." To truly accept the parents from the school side, Parent 630 expressed that a "parent needs to be made to feel that the school NEEDS their involvement in the special education process as they are the experts in their children. They should not be made to feel like they are REQUIRED."

Theme 2: Family and Contextual/Home-based Factors

This theme shows parents' concerns and hopes that are related to what parents believed a parent could or should do to improve their school involvement and engagement. Parents argued the importance of their involvement, knowledge, and capability to support their children. For instance, Parent 101 reported that to improve parent engagement, "parents should also communicate with school teachers about their children's recent situations" in addition to teachers' initiatives. Parent

373 also commented, "parent engagement requires not only parents' motivation, but also, maybe more importantly, parents' ability–technology, skills, and knowledge. With high motivation and low capability, many schools' educational activities are not appropriate for parents to participate." Parent 373 continued, "how to support parents to improve their attending capability should continuously consider many aspects, such as the training focus, training strategies." Specifically, Parent 123 and Parent 14 recommended schools provide training opportunities to parents related to their children's future development/resources availability, and accessibility.

Theme 3: Systemic Influences

Another central theme based on the parents' self-reported perceptions related to what parents believed system or policy makers could do to improve parent engagement, such as teacher training/educational system, school technology improvement, and online learning. Parent 635 pointed out the benefit and limitations of meeting remotely by stating that "Finding a time is easier with remote meetings, but I find them harder because no one can notice my body language when things are getting overwhelming for me." Parent 97 corroborated the positive experiences about their children's remote learning by indicating,

> Working with my son and his teacher remotely has been a real eye opener for me in terms of the difficulty of teaching a child with multiple disabilities and also how much more he is able to do than I gave him credit for. The remote experience has been really good for him; I don't hear many other parents saying that.

One barrier deriving from parents' responses was the lack of support from administrators. Parent 622 expressed that teachers who do not use many parent engagement strategies may not because they do not want to do so, but rather due to the lack of encouragement and support from their administrators. Parent 621 pointed out the importance of continuous support from school districts:

> I think school districts have to put more time and effort into coming up with different strategies as things are always changing for families (e.g., schedules, finances, housing, health, etc.). Strategies that may be good [to] day may not be good the next school year. Families should be surveyed often [constant evaluation] due to changing commitments, lifestyles, etc.

Theme 4: Digital Access and Equity

Digital inequities were a recurring concern based on parents' responses. Although some families appreciated the shift to online platforms, others found technology to be a barrier to engagement. A number of parents lacked access to devices or struggled with digital literacy. Parent 485 noted, "We can only communicate through the network, teachers can no longer actually know the children's ideas and learning progress." Although some schools provided resources such as loaner laptops and hotspots, many parents expressed a need for more training and support. Several noted the importance of digital access not just for students, but for enabling meaningful parent-school communication.

Discussion

The outbreak of COVID-19 greatly affected the in- and post-school outcomes of youth with disabilities (Trainor et al., 2023; Root et al., 2023). Although schools have largely returned to in-person instruction, the impact of the pandemic on parent-professional collaborations and communication remain relevant. Because parents are the most influential persons in youth's transition stages, effectively engaging parents of students with disabilities is essential (Fan & Chen, 2001; Henderson & Mapp, 2002; Pomerantz et al., 2007; Mazzotti et al., 2021). Engaging

parents of youth with disabilities has been discussed for decades (Epstein et al., 2019; Izzo et al., 1999; Mazzotti et al., 2021; Turnbull et al., 2015); however, the unprecedented COVID-19 pandemic brought forth the importance of the current study to understand parents' perceptions of the facilitators and barriers to their engagement with schools and support services during a global public health disaster.

An Ecological Perspective on Parent Engagement

Bronfenbrenner's ecological systems theory (1979) emphasizes that individual behavior is shaped by the dynamic interaction of multiple environmental systems, including the microsystem (immediate relationships and settings), mesosystem (interactions among settings), exosystem (indirect environmental influences), macrosystem (societal and cultural norms), and chronosystem (temporal and life course dimensions). Our findings build upon and expand this theoretical framework by illustrating how these interconnected systems influenced parent engagement during the COVID-19 pandemic for families of transition-age youth with disabilities. For example, Theme 1: School-Based Factors aligns with the microsystem and mesosystem, highlighting the immediate relational dynamics between parents, teachers, and schools, as well as how these interactions are mediated by school communication, teacher preparation, and relational trust. Theme 2: Family and Contextual Factors emphasizes microsystem-level factors within the home, such as parent capacity, knowledge, and self-perceived roles, while also revealing how family experiences intersect with broader support structures. Theme 3: Systemic Influences maps onto the exosystem and macrosystem by capturing how institutional support, district-level policy, and administrative leadership shape the conditions under which engagement occurs. Theme 4: Digital Access and Equity spans across systems—reflecting household-level digital access (microsystem), school technology infrastructure (mesosystem/exosystem), and broader societal inequities (macrosystem). Additionally, the pandemic itself represents a chronosystem-level disruption, altering long-standing engagement patterns and revealing the fragility or adaptability of systems under stress.

School-based Factors

The thematic qualitative analysis of parents' responses to the three open-ended questions helps further our understanding of the effects of COVID-19 on parents' engagement with their children's education. Of significance is that facilitators and barriers of parent engagement were uncovered related to system-based factors, school-based factors, family and contextual/home-based factors, and predisposing factors. The school-based factors included teachers' knowledge and skills for supporting children and the parents, having a positive attitude toward parent collaboration, and insufficient transition planning support. These results confirm the findings from previous studies regarding the importance of positive school climate (Lloyd-Smith & Baron, 2010) and teachers' belief and efficacy on supporting parents (Hirano & Rowe, 2016) in parent engagement efforts. The family and contextual/home-based factors included parents' stress level, resource accessibility, cultural capital familiarity, self-efficacy level, and children's disabilities and characteristics. It is worth noting that even with the general decrease in parent engagement during COVID-19, three parents from this study reported improvement of parent engagement during distance learning due to the need for frequent communication between school and home. Also, during the pandemic, many teachers made more intentional efforts, such as applying hybrid learning by creating interactive video lessons in addition to traditional in-person instructions (Daniel, 2020). Due to the COVID-19 social distancing and stay-at-home guidelines, parents were

forced to use different avenues to connect and collaborate with school teachers, such as digital communication (Wilinski et al., 2022). Yet, not all families can access technologies and/or feel comfortable navigating the technologies effectively. According to the National Telecommunications and Information Administration (NTIA)'s Internet Use Survey data, one in five U.S. households are not online, and the online access rate was lower among lower-income households (NTIA, 2024). Although many schools provided loaner computers and hotspots, and some companies offered free internet access, increasing internet availability for families who previously lacked it, many families still struggled with the skills needed to navigate these technologies effectively and additional training and continuous support are essential (Haller & Novita, 2021).

Family and Contextual/Home-based Factors

In addition to the school-based and family and contextual/home-based factors, this study also identified system-based factors and existing situations that were seldom discussed in prior studies. System-based factors refer to how systems could promote parent engagement at a system level, such as requiring in-depth teacher training on culturally responsive practices, sympathy, and communication skills. Parents in this study highlighted resource limitations, such as districts lacking the knowledge or funds to provide adequate support to parents, and schools struggling to effectively communicate with parents while fulfilling their primary responsibilities to students. These findings align with the perceptions of school administrators during the COVID-19 pandemic, who reported challenges in maintaining effective communication between stakeholders (Peltola et al., 2024). During the unforeseen pandemic, there were few protocols to guide immediate next steps, and district and school administrators were tasked not only with delivering the usual services provided before COVID-19, but also with providing meals, delivering healthcare services to students, fostering a sense of community, and offering additional support to families in need (Ahmed et al., 2024). Given these time and resource constraints, it became even more crucial for district and school administrators to ensure ongoing communication through multiple approaches, such as sending clear messages, using user-friendly platforms, tailoring information for diverse populations, and sharing it through trusted representatives (Hyland-Wood et al., 2021).

System-based Factors and Predisposing Situations

Additionally, parents in the current study reported existing situations that presented barriers to their engagement (e.g., children's disability/characteristics, family's work, lack of transportation, time conflict, and weather). These results align with the NLTS2 findings, which identified children's negative behaviors and lack of resources and external supports as having negative relationships with parents' school involvement (Newman, 2004). Among all the above identified barriers, two parents in this study indicated they can do a lot on supporting their children's education during the lockdown, such as providing direct educational guidance or supervising their children's homework during the break of their work-from-home time. These results showed the shift to distance learning might have placed some parents in a more central role in their child's day-to-day educational activities (Alharthi et al., 2023). In addition, parents' perceived self-efficacy has been linked to students' positive health and learning outcomes and parents' positive views about their ability might have promoted some parents' active engagement in their child's education (Ma et al., 2024; Oppermann et al., 2021).

Limitations and Directions for Future Research

There were several limitations of this study that offered directions for future research. First, our participants were mainly recruited from state parent centers in the United States. Parents recruited from other avenues may have perceptions that could be distributed differently across the five identified themes. Future studies should consider various channels, such as school settings, local agencies, and religious settings to identify diverse populations. Second, the study adopted some demographic items adapted from NLTS2 rather than the more recent NLTS 2012. Future research should consider utilizing or comparing items from NLTS 2012 or more recent data to better reflect contemporary educational contexts and service systems. Third, the data were limited to parents' subjective self-report results, which provided a narrow view. To better depict the whole picture, future studies are warranted to recruit and analyze multifaceted perspectives (e.g., perceptions from educators, youth, and administrators). In addition, although the three open-ended questions offered participants opportunities to elaborate on their thoughts regarding facilitators and barriers to parent engagement strategies, follow-up inquiries and discussions among participants sharing similar backgrounds could potentially foster more profound conversations. Future research endeavors may incorporate focus groups or interviews to glean more comprehensive insights regarding factors that affect parental self-efficacy and strategies to promote the parental self-efficacy in managing the impact of unforeseen crises. Lastly, the study sample was recruited during the COVID-19 pandemic, and the three open-ended survey questions were designed to gather participants' general perceptions of barriers and facilitators to parent engagement. As a result, it is not always possible to clearly distinguish whether the experiences described occurred prior to the pandemic, emerged during it, or were intensified by it. Given that participants' perceptions were shaped by cumulative experiences over time, this ambiguity should be considered when interpreting the findings.

Conclusion and Implications

The COVID-19 pandemic disrupted conventional patterns of parent-school engagement and highlighted both persistent and emerging challenges faced by families of youth with disabilities. Through an analysis of 642 parent narratives, grounded on the Bronfenbrenner's ecological systems theory (1979) we identified four intersecting domains (i.e., school-based factors, family and contextual conditions, systemic structures, and digital access and equity) that shaped engagement during educational disruptions. These insights emphasize that parent engagement is not solely a function of individual will or behavior, but rather the product of relational, institutional, and structural contexts.

Digital Inclusion

Digital inclusion, as defined by the National Digital Inclusion Alliance (NDIA) in 2017, refers to the efforts necessary to ensure that all individuals can access and effectively use technology. This concept encompasses five essential components: affordable broadband, appropriate internet-enabled devices, access to digital literacy training, quality technical support, and inclusive online content that fosters self-sufficiency and meaningful participation. In our study, parents reported positive engagement experiences during the COVID-19 pandemic, attributing improvements to more frequent and flexible digital communication between schools and families. These findings suggest that timely and effective collaboration remains possible even in the absence of traditional, in-person interactions. However, such benefits were not equitably experienced. Several parents

described barriers related to digital navigation, including limited access to technology, unstable internet connectivity, and a lack of digital literacy skills needed to support their children's remote learning.

These challenges align with national trends, which indicate that approximately 15 to 16 million students in the United States lacked adequate connectivity or devices during the pandemic, with families in under-resourced areas facing disproportionate impacts (Cruz, 2021; Pittman et al., 2021). As technology becomes an increasingly permanent fixture in educational delivery, schools must prioritize digital equity. It is suggested that schools partner with local organizations, such as local parent support centers, to implement regular training sessions focused on accessibility tools, including features like Zoom's closed captioning, screen-reader compatibility, and navigation of Google Classroom's guardian tools. These sessions should be multilingual and tailored to parents' varying digital literacy levels (Cruz, 2021). Furthermore, both educators and families must have access to stable WiFi and devices, along with the skills and ongoing technical support to use them effectively (Kaliisa et al., 2022). To address these needs, school districts should consider investing in long-term infrastructure—such as expanding device loan programs, subsidizing broadband through community partnerships, and ensuring that educational platforms adhere to universal design principles. These strategies should be supported by ongoing data collection to track access and proactively identify gaps in digital inclusion (Cruz, 2021).

Toward Systemic and Relational Solutions

In addition to digital equity, our findings suggest that many engagement challenges stem not from a lack of effort, but from a lack of mutual understanding, shared responsibility, and authentic partnership. For example, under Theme 1 (School-based Factors), parents frequently expressed that while teachers showed commitment, they often lacked the necessary training or knowledge to support transition planning effectively. Others described feeling excluded or undervalued during meetings, raising questions about whether educators truly view parents as partners in the process. Similarly, Theme 2 (Family and Contextual Factors) highlighted that parent engagement is not just about motivation but also about capacity—some parents lacked the knowledge, confidence, or digital skills needed to participate meaningfully, despite being eager to do so. Theme 3 (Systemic Influences) underscored the role of school leadership and district policies in either enabling or constraining parent engagement, with some parents noting that a lack of administrative support left teachers without the tools or encouragement to collaborate. Finally, Theme 4 (Digital Access and Equity) revealed that for many families, engagement was limited not by will, but by systemic digital inequities that made communication and participation difficult. These findings point to a critical need for deeper inquiry into how both teachers and parents perceive the nature and purpose of engagement. Some questions might be used to evaluate how the parent engagement status school has to the parents. For example, do the parents see meetings and collaborations as essential, effective, and shared responsibilities? Do parents feel their expertise is recognized and respected, or do they feel marginalized within the process? While surface-level interventions—such as professional development or sending flyers home—can address logistical barriers, they are insufficient to transform the underlying relational and cultural dynamics that influence engagement.

By integrating an ecological perspective with parent engagement and examining the multilayered barriers and facilitators experienced by families of transition-age youth with disabilities during the COVID-19 pandemic, this study underscores the need for continued research

and practice that move beyond surface-level solutions to address the deeper perceptual and systemic factors influencing parent engagement.

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Appendix A

Survey Development

The survey was developed in four steps. In Step 1, we reviewed existing published literature and articles. Then, we reviewed existing comparable survey instruments and checklists. In Step 2, we developed the survey based on current knowledge on school-based parent engagement. In Step 3, we had expert reviews to ensure the validity and quality of the survey instrument. In Step 4, we conducted a pilot testing of the survey instrument. The survey items mostly used 6-point Likert scale but also included three open-ended questions to foreshadow the details. Specifically, the survey instrument comprised 52 items. Of the 52 items, 23 were questions in Likert-scale rating, three were open-ended questions, and 26 were demographic questions. Likert scale has been commonly used in research as an attitude scale (Gall et al., 2014). The 23 Likert-scale questions in this survey were regarding parents' experiences and perceptions on school-based parent engagement strategies. Open-ended questions allow for identification of natural responses and avoid potential biases from suggested answers (Reja et al., 2003). The three open-ended questions were to solicit parents' responses on barriers that prevented them from engaging in their child's school activities, additional strategies they found useful, and any final thoughts about their experiences with school-based parent engagement strategies.

Survey

Below, we present the survey instrument, with the three open-ended questions used in this study, which appeared at the end of the full survey.
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The second section has 27 questions. You will be asked about your and your child's **demographic information.**
  If you have more than one child, please keep your child with disabilities in the transition age (14-21) in mind when responding to the survey questions.

End of Block: Section A Instruction

Start of Block: Section 1

Q200 The first section has 23 Likert scale questions and 2 open-ended questions. You will be asked to rank on (a) How often do you experience each strategy from your child's school teacher, and (b) at what level do you think each of them to be helpful.

The first section has 23 Likert scale questions and 2 open-ended questions. You will be asked to rank on (a) **How often do you experience each strategy from your child's school teacher**, and (b) **at what level do you think each of them to be helpful.**

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teachers in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
1. Teachers provide me with **information** regarding **parent training** opportunities (e.g., workshop, brochure, webinar, online resources).	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
2. Teachers **answered my questions** regarding my children's needs or if did not know the answer to a question **sought out information** to answer the question.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
3. Teachers provide me with **resources** related to **my child's services** and **community resources** (e.g., internship opportunities, volunteers, job shadowing).	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
4. Teachers **coordinate/integrate resources** regarding my child's needs.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
5. Teachers **communicate** with me **clearly** (e.g., avoid use of jargon, talk clearly)	○	○	○	○	○	○	○	○	○	○	○	○

Q205 Question 6-10 out of 25

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teachers in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
6. Teachers **invite me** to my child's **IEP meeting** through my preferred methods (e.g., phone call, text, email).	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
7. Teachers **provide notes** to keep me updated on my child's school performances.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
8. Teachers **share transition assessment results** with me.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
9. Teachers are **available** when I have a question regarding my child.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
10. Teachers **revise** my child's education or future plan or **teaching strategies** based on **my feedback**.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A

Q208 Question 11-15 out of 25

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teachers in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
11. Teachers **connect** me with other **service providers or community agencies** (e.g., community businesses, religious organizations) based my child's needs.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
12. Teachers **invite and include me** to develop, review, and improve **school policies** that affect my child.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
13. Teachers **invite me to be involved** in my **child's academic** learning activities at **home** (e.g., the teacher asks my child to complete homework with me).	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
14. Teachers **check-in** with me regarding myself and **my family's wellbeing**.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
15. Teachers **express care** and sensitivity to **my emotional needs** (e.g., provide comforting words or encouragement when I express my emotions).	○	○	○	○	○	○	○	○	○	○	○	○

Q209 Question 16-20 out of 25

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teachers in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
16. When discussing my child's schoolwork or performance, teachers **identify my child's strengths**.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
17. Teachers **consult with me** about **effective strategies** that myself and my family have used with success.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
18. Teachers **initiate conversations** with me about my **culture** and family **background**.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
19. Teachers obtain my family and **cultural values** and beliefs through surveys or interviews to **improve their instruction** for my child.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
20. Teachers provide **flexible schedules** for me to participate in **activities**.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A

Q206 Question 21-23 out of 25

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teacher in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
21. Teachers **provide childcare** or some equivalent supports **when I come to school** for meetings or training.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
22. Teachers **show continuous interest** to me/my **family's values and beliefs** (e.g., ask what beliefs I have and my family has toward my child's education and future).	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
23. Teachers **provide a safe space** for me to **share my thoughts** when holding a parent-teacher meeting (e.g., does not share my or my child's private information with others without my permissions)	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A

Q11 24. What **barriers** could you identify that may **prevent you from** engaging in your child's school activities?

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Q12 25. What are other **strategies** that are not listed above but you think are **helpful** for engaging you in your child's educational/school activities?

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Q40 27. This is the **LAST** question of the survey. Before you submit your answer, is there anything else you would like to tell us about your experiences with school-based parent engagement strategies?

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The first section has 23 Likert scale questions and 2 open-ended questions. You will be asked to rank on (a) **How often do you experience each strategy from your child's school teacher**, and (b) **at what level do you think each of them to be helpful.**

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teachers in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
1. Teachers provide me with **information** regarding **parent training** opportunities (e.g., workshop, brochure, webinar, online resources).	○	○	○	○	○	○	○	○	○	○	○	○
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	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
5. Teachers **communicate** with me **clearly** (e.g., avoid use of jargon, talk clearly)	○	○	○	○	○	○	○	○	○	○	○	○

Q205 Question 6-10 out of 25

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teachers in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
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Q208 Question 11-15 out of 25

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15. Teachers **express care** and sensitivity to **my emotional needs** (e.g., provide comforting words or encouragement when I express my emotions).	○	○	○	○	○	○	○	○	○	○	○	○

Q209 Question 16-20 out of 25

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19. Teachers obtain my family and **cultural values** and beliefs through surveys or interviews to **improve their instruction** for my child.	○	○	○	○	○	○	○	○	○	○	○	○
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20. Teachers provide **flexible schedules** for me to participate in **activities**.	○	○	○	○	○	○	○	○	○	○	○	○
	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A

Q206 Question 21-23 out of 25

Please be sure to scroll the questions to the right.

	How **often** do you **experience** this strategy from your child's teacher in the past year?						At what level do **you think** each of the following strategies to be **helpful** for engaging you in the school activities?					
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	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A
22. Teachers **show continuous interest** to me/my **family's values and beliefs** (e.g., ask what beliefs I have and my family has toward my child's education and future).	○	○	○	○	○	○	○	○	○	○	○	○
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	Never	Rarely	Sometimes	Often	Always	N/A	Not at all helpful	Slightly helpful	Moderately helpful	Very helpful	Extremely helpful	N/A

Q11 24. What **barriers** could you identify that may **prevent you from** engaging in your child's school activities?

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Q12 25. What are other **strategies** that are not listed above but you think are **helpful** for engaging you in your child's educational/school activities?

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Q40 27. This is the **LAST** question of the survey. Before you submit your answer, is there anything else you would like to tell us about your experiences with school-based parent engagement strategies?

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