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Parent perceptions of remote instruction for students with extensive support needs

Abstract

In the wake of the COVID-19 pandemic, schools shifted to non-traditional education overnight, disrupting learning for millions of children in the United States. Despite the broad impact of these shifts in schooling, its effects have not been uniform. How would the specialized instructional supports known to be effective in meeting the needs of students with extensive support needs (ESN) be provided remotely? We interviewed eight mothers of students with ESN to learn how non-traditional education impacted the educational experiences of students with ESN. Our findings highlight challenges parents experienced when working to support their children's at-home learning and the overall perception that non-traditional education was highly unsuccessful and cannot replace in-person learning for participants' children. Findings also include the unexpected benefits parents reported from remote service delivery that may be considered for future recommendations for instructional practices for students with ESN.

Keywords: Extensive support needs, Remote instruction, COVID-19, Inclusive education

In March 2020, the COVID-19 pandemic caused a radical educational disruption for most students across the United States; in a matter of days, the primary educational setting shifted from school to home. It was estimated that close to 55 million students (Education Week, 2020) moved from the traditional model for the provision of instruction in physical school buildings to the provision of education through “non-traditional means” (Brewer et al., 2021). The term non-traditional education was used by Brewer et al. to refer to the:

> …many variations and differences from the traditional face-to-face, in-person instruction typically delivered in schools. This may include hybrid or blended schedules of instruction, as well as instruction that is completely virtual, delivered strictly through online formats that might include both synchronous and asynchronous components. (p. 1)

There was extensive concern about this move to non-traditional education regarding quality of instruction and students’ ability to access and engage with content and peers. News outlets immediately acknowledged the potentially disproportionate impact on students with disabilities (e.g., Meckler & Strauss, 2020). Little mention, however, was made of the increased risk of impact on students with extensive support needs (ESN).

While there is no standard definition of this specific population, students with ESN may include those diagnosed with cognitive impairment, multiple disabilities, and/or concomitant health care, physical, mental health, or communication needs (Wehmeyer et al., 2016). Students with ESN often need constant support for learning and development and might participate in Alternate Assessments Based on Alternate Achievement Standards (Taub et al., 2017).

Comprehensive reviews of the literature on instruction for students with ESN point to evidence-based and promising practices needed to support their learning (Browder et al., 2017, Taub et al., 2017). Browder et al. (2017) identified key evidence-based practices for students with severe disabilities in (a) instruction, (b) skills and academics, and (c) instructional supports. They summarized that extant research strongly supported instruction based on the principles of applied behavioral analysis using specific prompting hierarchies to build toward knowledge and skill development and, ultimately, independence. Additionally, Browder et al. described evidence for using these approaches to teach academic and functional skills in general education classes and facilitate the generalization of these skills across settings. Effective instructional supports included using non-disabled peers as tutors and promoting social interaction. Further, Taub et al. (2017) argued that opportunities to learn for students with ESN must be purposefully designed, individualized, and embedded in the curriculum throughout the day using the principles of Universal Design for Learning. Overall, extant research highlights the need for highly individualized, systematic instruction with concrete materials and hands-on experiences for students with ESN (Browder et al., 2014; Brown et al., 2019; Courtade et al., 2015). Such instruction inherently requires in-person delivery by teams, including special educators and related service providers (e.g., occupational therapists, physical therapists, and speech-language pathologists) who collaborate to plan, implement, and evaluate specialized services.

There is limited research to guide educators in providing non-traditional education to students with ESN. There is some research on providing online instruction to students with disabilities (Smith et al., 2016); however, that work focuses on students with high incidence disabilities. Smith and Bashem (2014) noted that when adapting distance education to serve students with ESN, accessibility must be assessed from physical, sensory, and cognitive/learning perspectives. However, educators reported struggling to design distance instruction for students with ESN, given typical school policies "were designed to give them access to a school building and the specially trained people inside it" (Rice & Carter, 2015, p. 33).

The pivot to non-traditional education led to students being at home with caregivers instead of in-person with trained special educators, related service providers, paraprofessionals, and peers. In place of hands-on instruction and collaborative service delivery, instructional modalities included worksheets, asynchronous online assignments, or synchronous virtual meetings. How could the specialized instructional supports known to be effective in meeting the needs of students with ESN be provided? Broadly, we wanted to know how the educational needs of students with ESN were addressed. We aimed to learn from parents and primary caregivers what services their children with ESN received and what they thought about those services. Our research question was: What are successful approaches and needed solutions to non-traditional education for students with ESN?

Method

We designed an exploratory qualitative research study to help us better understand how the schooling experiences of students with ESN changed and how families' engagement, advocacy, and support of their children shifted during the COVID-19 pandemic. Specifically, this study used a generalist qualitative research design (Lauterbach et al., 2022). Data were collected through semi-structured interviews with parents and caregivers of students with ESN. Data were analyzed systematically and inductively to identify how participants made meaning of their children's non-traditional education during the COVID-19 pandemic. As such, we used a constructivist epistemological lens, which emphasizes that meaning is "constructed by human beings as they engage with the world they are interpreting" (Crotty, 1998, p. 43).

Participants

Participant criteria included being a caregiver of a child with ESN who (a) was enrolled in public school grades 3-5 in the Fall of 2020, and (b) was included in a general education setting for at least part of the school day. We focused on grades 3-5 because of the increased academic demands in those grades compared to earlier grades, and to avoid the complexity of having multiple content-specific teachers, as is the case in middle and high schools.

We targeted our recruitment efforts in Massachusetts, North Carolina, and Virginia, the states in which the researchers resided, using purposeful and snowball sampling (Creswell, 2013). Recruitment flyers and social media posts were distributed via email to personal contacts (e.g., current and former colleagues, alumni, school district contacts); parent organizations (e.g., Parent Training and Information Centers); and public school special education parent advisory councils. The flyers and social media posts included links to the study's website, where potential respondents were asked to complete a short screening questionnaire to confirm they fit participation criteria. Flyers and screening questionnaires were translated into Spanish, Arabic, and Mandarin in hopes of recruiting culturally and linguistically diverse participants.

After reviewing the screening questionnaires for eligibility criteria, we sent follow-up emails to schedule interviews with interested parents and caregivers. Our final sample consisted of eight participants, all of whom were mothers of third to fifth graders with ESN (Table 1). The participants' children included five males and three females, with participant-reported diagnoses of Down syndrome, autism spectrum disorder, Angelman syndrome, and multiple disabilities. Prior to the pandemic, the amount of time that participants' children spent in inclusive settings varied, though only one child spent 80% or more of the day in the general education classroom (Table 1). The limited inclusive education for participants' children reflects national trends of low rates of inclusion for students with ESN (U.S. Department of Education, 2022). Most participants (*n*= 7) were White. Despite extensive recruiting within the targeted states, we faced challenges in recruiting a larger and more diverse participant pool, likely due to the pandemic related stresses on care providers. Several participants confirmed that other parents of students with ESN were “too overwhelmed to participate” or “burned out on Zoom.”

Positionality and Reflexivity

As teacher educators, former PK-12 special education teachers, scholars, consultants, and advocates, we approach this study as proponents of inclusive education for students with ESN. We collectively believe that students with ESN are students first who have a right to be educated in general education settings alongside their peers without disabilities. Our work is grounded in supporting teachers, families, and students to adopt a strength-based perspective on diversity and disability while promoting access to high-quality instruction and removing systemic barriers.

Our knowledge of evidence-based practices for students with ESN prompted this study, as we shared concerns as to how the use of hands-on materials, systematic and differentiated instruction, individualized support from teachers and paraprofessionals, and social opportunities with nondisabled peers would translate to non-traditional education. We acknowledged our experiences as educators and family members as part of our collective expertise to conduct this study, and we also worked consistently to recognize and mitigate potential bias. All six authors were involved in all aspects of the study. We met weekly to discuss how we were approaching the study, centering the instructional needs of students with ESN, and remaining grounded in the data provided by the participants who were the experts on their own experiences.

Data Collection

All study procedures were approved by Boston University’s Institutional Review Board. The interviews were conducted over Zoom and were recorded for subsequent transcription. The semi-structured interview protocol included questions about what did and did not work during remote instruction, home/school communication, and inclusive opportunities, as well as the impact of non-traditional education on the participant's family. One team member conducted each interview, while another team member was a notetaker/monitor to ensure all questions were asked. Interviews ranged from 47-91 minutes and averaged 73 minutes. Each recording was transcribed by a member of the team and summarized into a two-page memo, which later served as the participant member check. Overall, our study yielded 271 total single-spaced pages of data, consisting of interview transcripts, member checks, interview notes, and analytic memos.

Data Analysis

We analyzed data systematically and inductively through an iterative process of open, categorical, and thematic coding to identify how participants made meaning of non-traditional education during the COVID-19 pandemic (Bogdan & Biklen, 2004). All team members closely read the same three transcripts to increase our familiarity and then engaged in open coding by developing process, descriptive, and in vivo codes (Saldaña, 2016). We met to discuss patterns in the data and our open codes. In teams of two, we then completed open coding on three additional transcripts and individually developed analytic memos to help make sense of our initial thoughts, impressions, interpretations, and potential biases.

Through multiple rounds of discussion and the use of a shared data management system to coordinate recurring patterns and concepts in the data, we refined and categorized our 336 open codes and developed a codebook. The codebook consisted of 16 categorical codes (e.g., Student Engagement, Benefits, Impact on Family, What Worked Well, What Didn't Work Well), and included examples and non-examples for each code. We used the codebook to individually code the same transcript and then collectively discussed our codes until there was >90% consensus. We repeated the same process with a second transcript and refined our codebook. We used the refined codebook to recode all remaining transcripts.

During thematic coding, we focused on the conceptual level of themes by noting relationships between the categories (Creswell, 2013). We used pattern coding, which facilitates abstraction by collapsing codes into fewer key themes (Saldaña, 2016). Each team member wrote analytic memos to highlight their pattern codes, which we discussed and refined until consensus was reached. Additionally, we compiled a shared spreadsheet of data units (i.e., participant quotes) that were considered pertinent and that illustrated aspects of each theme.

Quality Indicators and Trustworthiness

While conducting the study, we ensured quality indicators for interview studies (Brantlinger et al., 2005). We used screening questionnaires to purposefully identify participants who fit study criteria and could provide data related to the research question. The semi-structured interview protocol was reviewed by two external peers for clarity and then piloted with three parents/caregivers of students with ESN. All interviews were recorded and transcribed verbatim using a secure online platform to maintain confidentiality.

We engaged in a variety of methods to enhance the credibility or trustworthiness of our findings (Brantlinger et al., 2005). Researcher reflexivity was a component of our weekly meetings in which we discussed our assumptions and beliefs about non-traditional education for students with ESN and the personal experiences that shaped our perspectives. We used analytic memos to guide our iterative discussion of findings while constantly reflecting on potential biases and remaining grounded in the data. After each interview, a team member created a two-page summary using a structured template that also included follow-up questions for participants to clarify or expand upon their initial response. The summaries served as member checks and were sent via email to participants for review. Seven of eight participants responded with approval, clarification, or revisions, and the responses were added to the transcripts as data.

Findings

The thematic findings highlight participants' perspectives on supporting their children with ESN during non-traditional education. Overall, students with ESN who rely on highly individualized and direct support during in-person instruction were disadvantaged and seemingly deprioritized by school professionals during non-traditional education, and participants amassed heavier and more complex responsibilities. Despite findings of mostly negative experiences, some participants reported benefits related to the use of technology for monitoring student work and conducting virtual meetings, as well as, for some, improvements in communication with school staff. We first describe the context of non-traditional education for participants' children. Three thematic sections follow that focus on challenges to participant involvement, challenges to student engagement, and unexpected benefits during non-traditional education.

Context of Non-Traditional Education

All the participants' children moved to remote instruction in March of 2020 when their public schools responded to the COVID-19 pandemic by closing at first temporarily and then extending closure through the remainder of the school year. Most participants (n= 7) reported this transition to remote instruction did not work for their children, and specifically described it as "challenging" (Rachel), "unclear" (Jessie), "miserable" (Kelly), "frustrating and stressful" (Joy), a "disaster" (Noelle), and "more isolating than ever" (Barbara). Representative of the challenges experienced during this initial, sudden period of remote instruction, Noelle explained:

> My God, I think I've just blocked out all the memories of last year [spring 2020] because it was just so awful. …From March and April of the beginning of COVID, I cried every day. I felt so guilty about what I wasn't giving my kid and it took me a lot of self-talk and a lot of permission to just say to myself it's going to be okay. If Gabe doesn't learn a thing

> for the next two months, it's okay. Let it go. Don't take this on. So, I'm not being flip about the fact that I don't think he academically progressed much. But I also had to do some self-preservation and some self-care around how much can I own of this and how much do I need to let go because it was drowning me. So, I let it go.

We focus the rest of this section on experiences of non-traditional education during the following school year. Beginning in Fall 2020, over half of the participants' children (*n*= 5) had a hybrid instructional model, attending in-person school up to four days per week with one day of remote instruction. The other three children received full-time remote instruction that fall. All but one child transitioned to fulltime in-person or hybrid instruction by spring 2021.

Challenges to Parent Involvement: "Just a horrible, heavy weight"

While most participants shared that non-traditional education during the 2020-21 school year improved somewhat from what they endured during spring 2020, the overwhelming pattern in responses indicated that non-traditional education did not work for their children with ESN, nor the caregivers themselves. Participants described being forced into the almost impossible situation of becoming their children's teachers regardless of their home and employment situations, and without enough support from their schools. Moreover, they experienced these struggles daily, which was logistically demanding and emotionally difficult. They also felt stressed to advocate or improve the situation, and guilty when they were unable to do so.

Participants felt they failed their children, despite being placed in an untenable situation of navigating their responsibilities related to family, employment, and non-traditional education. Kelly described every day for her child being "another day he's not getting anything or another day he's not learning, and it was enormously just a horrible heavy weight." Participants were not equipped with specialized, individualized materials, nor trained to provide the intensive support their children needed to learn. The physical and emotional demands also resulted in frustration and anger. For example, Noelle shared:

> I think it's somewhat sinful that [school district] believes that he [Gabe] got an entire year of instruction when he went to school [virtually, i.e., remote instruction] for an hour and a half, every day, up until when he was back live. …He didn't get a day a full day of education for April, May, September, October, November, December. Six months.

Participants highlighted several common challenges: (a) balancing employment with remote instruction, (b) coordinating remote instruction for multiple children, (c) receiving little guidance or support from school professionals, and (d) navigating new or multiple types of technology.

Balancing Employment with Remote Instruction: "I was not the best employee, and she was not the best student."

One of the most common challenges participants described was navigating employment responsibilities and supporting their children with ESN during remote instruction. Six of the eight participants were either part-time or full-time employees, and five worked remotely during this time. Participants described ongoing difficulties meeting their job demands while providing almost constant support to their children with ESN, many of whom previously had consistent and/or one-to-one paraprofessional support when in-person at school. The inability to demarcate the home, professional, and academic environments increased parent stress, and in some cases, parents prioritized necessity (i.e., work) over child support. For example, Joy stated, "We have to work; we cannot just sit with him all the time." Also, Noelle shared, "If he made progress or not, I don't know. Because I was doing my best to squeeze in eight hours a day [of work], in a four-hour window with 8,000 interruptions so I honestly couldn't tell you how it went."

Participants noted that their children needed constant support, which made it difficult for them to also work from home. For example, Jillian described:

> So remote instruction was very challenging for us because she's not going to sit at a computer by herself for several hours, so I was having to sit beside her, try and do my job and try and keep her on task. … I think a lot of the kids were able to do these assignments independently, but Zoe was not. …And it led to sometimes at, like, seven o'clock at night, we are finishing up her stuff; at 10 o'clock at night, I'm still working finishing up my stuff. It was just long days…I was not the best employee, and she was not the best student. It was rough.

Multiple distractions were also an issue for participants, particularly Ali, who continued to work at a restaurant and brought her daughter to work four days per week to support her instruction:

> While I was able to be a part of a lot of the virtual school, I was still working. So, I still had to do my job, which is working in a restaurant. So, you know, trying to coordinate baking a cake, while I'm popping over here to make sure Marie was trying to do what she needed to do…you know, it was super fun [sarcastic tone].

Coordinating Remote Instruction for Multiple Children: "It was just not sustainable."

Another common challenge faced during remote instruction was when participants supported multiple children at home, including their child with ESN. Participants were expected to balance multiple instructional needs simultaneously with uneven support from the school on how to meet these varying needs. As an exemplar, Jessie (a mother of three) stated, "I feel like I was in the position of having to provide one-on-one support for three people at the same time, and it was just not sustainable. …I was exhausted. I couldn't do anything anymore." Similarly, Rachel described her demands at home with three children including her son, Jean, with ESN:

> I have three kids, and one of them was a first grader when it first happened, so she just needs a lot of support because she's a small child. And then my other child, it was his first year in middle school. I mean, it was just a lot. For his [Jean's] OT and PT, I was expected to keep that schedule, or he was expected to keep that schedule, which means me. I think it would have worked well if he had a [Google] Meet that people came to, but instead he was having to navigate. He has to navigate meetings with the general ed teacher, and then with his TA, and then with a special education teacher, and then he's got to remember at two o'clock on Tuesday to go to his speech therapist, which means I have to figure out a way to get him [to log on]. And then he has to remember OT because no one's managing, they weren't managing his schedule.

These examples highlight the parents' roles as key facilitators in their children's ability to access remote learning and the changes parents experienced supporting all their children.

Receiving Little Guidance or Support: "I had no idea what to do most of the time."

Transitioning to remote instruction occurred without sufficient guidance or support from school professionals for participants and their children with ESN. Participants quickly had to adopt the roles of the teacher, related service provider, and paraprofessional. However, most participants were not trained in these roles and thus were not prepared to enact them on their own. Jessie explained her experience as, "I felt like they just left me on my own basically like the teachers would email me [about how it was going], but I was left to deliver any instruction, which I had no idea what to do most of the time." The lack of resources was also noted and problematic, as Jillian described: "They didn't really send me a ton of stuff. I would have to send a note and say she [Zoe] can't do this." Without additional academic materials or guidance from school professionals, Zoe struggled with learning from home; work on the computer meant to take an hour took her four to five times that. Jillian also conveyed frustration of the lack of support when she stated she felt she “essentially had to be a teacher for more hours during the day than her [Zoe’s] teacher was a teacher during the day.”

Kelly described experiencing the same lack of guidance and support from school professionals, though she also named the affordances she had to be able to provide her own resources to supplement her child’s learning during this time:

> I did tons of research. I certainly wouldn't say that I did a good job, but I did as much research as I could on the programs and curricula that I knew he was using at school to try and find those things online. I printed out a bunch of worksheets and tried to find apps that kind of corresponded with those programs as much as I could to make those things available to Ben. I think we're fortunate because we have the resources to be able to afford to do those things, whereas I think we're probably not terribly common in that regard. You know, I was a stay-at-home mom so I could spend hours a day doing research if I had to. I didn’t have to work. I wasn't juggling a job and all those things. My daughter [without a disability] is really independent and so that was nice. But he wouldn't do it, I mean, I couldn't get him to do it.

Despite her efforts, her son still struggled to engage in academics. Moreover, as she described, most participants could not make up for the lack of guidance and support as she did.

Navigating New or Multiple Types of Technology: “Too many different types of technology”

Participants named specific challenges in the context of remote instruction related to navigating the increased use of technology. Notably, participants were willing to use, learn, and manage various forms of technology, but this became increasingly more demanding with numerous types of applications and platforms to keep track of and master with little support from the school. As a result, participants had limited capacity to support their children. Jessie's experience trying to keep track of multiple systems, platforms, and applications was common:

> The thing that was really hard, even for me, as an adult, is that every teacher didn't necessarily set things up the same way, or post assignments the same way, or ask you to turn things in the same way. And so, like, that was super confusing for me.

Rachel described similar experiences with the various platforms used:

> It was mostly the choice of technology and the variety of technologies. It was a real problem that every teacher has their favorite thing. You know, my younger daughter [without a disability], because she's young, their teachers stuck to Google Classroom and Seesaw. And those are the only two things you need to learn how to use, and we use them the same every day, whereas Jean, his special education teacher had her favorite quiz app, and his general education teacher had her favorite, so they were combining all these different technologies. For Jean, logging into all of them and finding them and getting to know all these different applications was really challenging. So, I think the trying to use too much, too many different types of technology, I think was a problem.

The practical enactment of remote instruction presented technological barriers for both children and parents. Notably, when students with ESN struggled to navigate the technology, the unexamined assumption seemed to be that the participants would be able to help them. Participants conveyed that this was not the case, particularly without clear guidance from school professionals. Even when the technology appeared to work as expected, participants shared it proved to be inconsistent, as Jillian described:

> They [Zoe's classmates] could pick a GoNoodle song if they did a really good job. And that was somewhat motivating for her (Zoe), but then, if she didn't get to pick, then she was like done for the rest of the day, so sometimes it had the reverse effect.

Challenges to Student Engagement: "On Zoom, how do you direct a sensory break?"

Non-traditional education resulted in drastic changes to children's routines and conceptualization of school with the nature of learning from home and their parents as their teachers, which did not work well for most children. Participants described immediate and ongoing challenges resulting in little student engagement and, thus, learning. Specific barriers were attending to instruction that was (a) provided by them as teachers, (b) primarily through a computer screen, (c) without the usual in-person support from paraprofessionals, (d) with minimal adaptations, and (e) with few interactions with classmates.

Parents as Teachers: "With us, it's horrible."

Participants were expected to take over the task of teaching and monitoring non-traditional education, and thus, played a crucial role in trying to maintain the continuity of education and services for their children with ESN. However, enacting dual roles of parent and teacher at home was not often successful. Children did not readily accept their parents as their teachers because they were used to the separation between home and school. Kelly explained:

> Ben was very much, like, "School happens at school, and I'm home, and this is where I don't go to school, like, I don't go to school at home. I don't understand why I'm seeing [special education teacher] on my screen and I'm at home." It was not a shift he was able to make to learn at home.

Unable to make the shift from school to home, the children did not listen to participants as teachers. For example, Noelle stated, "I didn't do any of the assignments with him [Gabe]. One, there was no time in my day, and two, he doesn't look at me as teacher so nothing got done." Joy affirmed this experience with her own:

> With us, it's horrible because he doesn't listen to us the way he listened to the therapist or the teacher. If the therapist is not here, and I tried to help him go through the session, he just not obeying. He just runs around, like, turn off the computer, like that.

These examples illustrate how meeting the needs of students with ESN was complicated by the change in the learning environment and the *people* administering the support. Students who normally need highly individualized and direct support from a special education teacher, general education teacher, related service provider, and/or paraprofessional, one-on-one or in small groups, now were expected to receive guidance from their parents/caregivers while viewing their educators through a computer screen. Instruction leaned heavily on parents, compounded by the assumption that parents could--and would--intervene. Kelly described the flaws with this:

> All of his instruction being one-on-one with a person who has a master's degree in special education, I am not a good substitute for that. I'm a big [IEP] team person because, like, I definitely know my son best, but I do not know how to educate my son. I cannot do it because I don't know anything about how to teach a kid with autism, really, and I don't know what the requirements are, and the curriculum that they're using to teach them to read is extremely specialized, and the special ed teacher has to be trained in how to deliver it, so if the special ed teacher--who's already an expert--has to be trained on how to do the teaching thing or the reading thing I'm like, I really can't do it.

Instruction through a Screen: "She just will not attend to a screen for that amount of time."

Instruction was provided primarily through a computer screen, requiring students to sit, pay attention, and listen to someone who was not in the room. Jillian recalled Zoe's experience:

> It's hard for Zoe to maintain focus for two solid hours staring at a computer and then the entire rest of the day she's expected to sit with me and try and do the other work and navigate all the different websites. No one wants to do work on the computer with their mom for six hours, and a lot of times that's how much time we spent on the computer.

Similarly, Barbara described that learning through a screen did not work for her daughter Ruby:

> She just will not attend to a screen for that amount of time. She won't even watch a movie she's never seen before from start to finish. I mean, she's just not the kid who likes to stare at a screen, and secondly, wasn't learning anything and was becoming very frustrated. There's just too much noise, too much chaos, too much verbal input. So, after a week or so I just said this isn't working.

These examples made clear that remote instruction's reliance on the computer screen made learning inaccessible to most participants' children. Ali described, "Since she [Marie] wasn't in-person, she would just shut down, and she might still be watching the computer, but she wasn't doing her work." Jessie described it as "watching tv" and explained:

> I feel that some of the things that were set up, like virtual class trivia and virtual clubs and stuff like that, those I didn't even try because I didn't feel like there was a good way for him [Riley] to participate. It just seemed like it was also very fast-paced, too. So, like, to get there and to be able to, like, help him navigate to what he might want to say or like, you know, answer a trivia question. By the time we got there, everybody had moved on.

Participants described challenges with pacing at both extremes. At times, their children with ESN struggled with engaging with a screen for long stretches, while in other moments, activities were too faced-paced. Neither worked well.

Participants also mentioned missing the in-person interactions and connections that were valuable components of their children's education pre-pandemic and were lost with the transition to non-traditional instruction. For example, Kelly described several challenges Ben faced:

> The energy between him and his teacher is important to him because he doesn't get that sense from a screen. But if he's sitting with someone, he knows what their mood is. He knows that they're patient with him. I think he also gives off a lot of nonverbal [behavioral cues], like, if he gets frustrated working with a list of sight words and he's not getting it, not getting it, and not getting it, he needs a sensory break because he's starting to shut down and get frustrated, and the teacher will get that sense from him in the classroom. But on Zoom, how do you direct a sensory break? How do you give a kid a sensory break in their own room at home and then do it in a way that they'll reliably come back after five minutes or however long they need?

Jillian described similar challenges of translating in-person supports and services to a screen, specifying the challenges with related services (e.g., occupational therapy, speech therapy):

> I just don't think that those types of therapies, at least for Zoe, work over the computer. I mean, she needs to be beside somebody. She needs to have something tangible in front of her. The FaceTime method, you know, the Zoom meetings, does not work. She loses interest very quickly.

Faced with learning at home through a computer screen without in-person interaction, many students struggled, as Rachel described:

> For my son [Jean], it just didn't work. He got frustrated and bored. He loves school, and he started hating school. He was having meltdowns; he was becoming aggressive. It

> really took a toll on him. And he was having to sit in a chair at 8:45am until 3:30 and not being engaged. And so, it was really hard for him. Online didn't work for him.

Absence of Paraprofessional Support: "He had an aide for a reason."

Six out of the eight participants' children received paraprofessional support while the children were receiving instruction remotely; however, those supports that were provided in-person pre-pandemic did not easily translate online. Rachel described this common situation: "He had an aide for a reason. He struggled in class even with everyone there. He needed help setting up for whatever activity the class was about to do. When he was sent home, that just completely disappeared." As a result, many participants tried to assume the role of paraprofessional to support their children, though often unsuccessfully because, as previously described, their children did not view them as teachers or paraprofessionals.

Participants provided examples of additional responses to this conundrum of the absence of paraprofessional support. Several participants stated their children's school provided virtual paraprofessional support, which proved to be ineffective, as Jessie shared:

> A lot of the problems with that were technical issues, like paras working from their home and not having a good internet connection. So, you know, they'd be trying to show him [Riley] a video, and they would try to stream it for him online, but because the connection was so bad, there'd be static or it would be like jumpy or delayed, so then we'd have to figure all that out. We'd have a 30-minute block, and it would take us 20 minutes to work through the technical issues, and then have like 10 minutes left.

Rachel described getting a second screen for Jean to attend to his virtual paraprofessional support, but it also led to new challenges for both Jean and her.

> He's a kid who already struggled with fine motor skills and has trouble managing in an in-person setting, and all of a sudden, he's having to manage listening to two people on two screens. And then this person [paraprofessional] that's supposed to support him, and mainly with transitions and getting ready, ends up being more of a distraction than anything…He's at home. It's like, anything that she [paraprofessional] needs, she ends up texting me, "Can you please go in via [Google] Meets to do this?"

Other participants requested in-home paraprofessional support from their school districts, though this was not provided. Ultimately, several participants--all of whom acknowledged having the privilege or resources to pay privately--hired in-home support on their own. They all said they needed such support to address ongoing challenges related to both their involvement and their children's academic engagement. Joy explained, "Luckily, we have an ABA therapist who can sit with him [Aidan] for some hours' worth of work with the virtual settings. He needs in-person, like, hands-on guidance. So, the virtual environment doesn't provide that." After their difficulties with paraprofessional support through the second screen, Rachel also hired someone to support Jean at home. She was pleased with the results, describing, "The only time it [remote instruction] worked was when I was able to hire someone to sit with him."

Minimal Adaptations: "She's bored because she's not doing anything with her hands."

Participants noted that accommodations were minimal during remote instruction for their children with ESN, particularly the use of concrete materials during academic lessons. The lack of concrete materials reflected a change from their children's typical supports during in-person instruction and contributed to the challenges of learning through a screen at home. Joy shared that "Without the hands-on, he's [Aidan] easily distracted. And he just ran off or, like, hit the computer button just to see how I react." Similarly, Barbara described multiple examples of the need for hands-on experiences with concrete materials to fully access academic lessons:

> They would try to read a book with Ruby, you know, over Google Meet and like, hold the book up. And I'm like, "Why doesn't she have a copy of the book in front of her? She's not going to watch you on the screen turn your pages." Or you know, where they tried to play a board game under their dock camera, but Ruby can't move her own piece, so they're moving her piece for her. So, I've kept saying to them, "We have so many games here at our house. Or give us the board, let Ruby do the game. She should be rolling your piece," right? Like, she's 12. She loves games. So, you know, she's bored because she's not doing anything with her hands. She's a kiddo who usually needs fidget toys.

Barbara contrasted this with the example of Ruby's PE teacher who made stories with characters from Ruby's favorite television show each week and dropped off the stories with crates of related materials at their house. In the stories, Ruby had to "save the day" through different PE activities. Barbara explained the benefits of such an approach: "She [Ruby] was super engaged and sometimes would forget, "Oh my gosh, I'm doing pushups. I hate pushups." Because she was focused, like, "I gotta save the day and be the superhero." Teachers who really pre-planned and gave us materials [were helpful].

Participants also emphasized the ineffectiveness of related services delivered through a screen due in large part to the lack of concrete materials and activities to motivate and benefit their children with ESN. Jillian described common difficulties faced by others:

> She [Zoe] did not do well with online therapy. It's almost impossible for some of that stuff. The speech therapist at one point kind of gave up and just sent some exercises for Zoe to do, like pronunciation-type exercises. The OT, she didn't give up, but she did a lot

> of games, so it wasn't like the actual things they were supposed to be working on. It was like two minutes of typing and then they play a game for five minutes and so she really got a very small amount of therapy. So, I feel like it was a wasted year.

The challenge of figuring out how to provide adaptations during non-traditional instruction often resulted in decreased motivation and engagement for the participants' children. Barbara highlighted again what worked well for Ruby, describing, "A lot of movement activity was helpful and hands-on. So, the therapists who would drop something off at our door prior to their meetings always fared so much better." Participants recognized this could be challenging during a pandemic, but also that their children were missing needed—and mandated—related services.

Limited Interactions with Peers: "You're just boxes on a screen."

Participants frequently shared that the online aspect of remote instruction exacerbated the already limited peer interaction experienced by their children with ESN. Multiple students struggled with seeing their classmates/friends on screen but not being able to talk or physically interact with them. Kelly reflected on the impact of remote instruction on Ben's well-being:

> All of his specials were virtual, so I think he very much missed the interaction with his general ed peers. He gets a lot out of those relationships. I think it's so therapeutic for him to be around typically developing children. I think he benefits a lot from that and so he didn't really get any of that this year.

Barbara described similar social challenges for Ruby during non-traditional instruction:

> She relies so much on physicality. She's a super verbal kid, though she's not always verbal at school because of her anxiety. So, I think she relies a lot on hugging kids or parallel playing near them, or them, like, including her in a circle. So, she can sit next to

> them and do something close to them, like, they're all doing a craft or art class. Without that physical presence, it really upset her because she didn't know how to reach out.

The buzz of the classroom and the physical interactions with friends were replaced with a computer screen in their home. Rachel described communication challenges in this context:

> I know, in-person, he [Jean] has an easier time navigating that situation. It's just really hard for someone who has difficulty speaking. You can understand him a lot better when you're in-person than when you're split off and you're just boxes on a screen.

Under these conditions, a real sense of isolation developed for all the participants' children.

Most participants emphasized the socioemotional well-being of their children and expressed hope for the return to in-person learning due to the importance of social interactions with peers. However, even that return to in-person social interactions with peers proved to be more challenging than expected because of prolonged social isolation. As an exemplar, Ali described multiple challenges Marie experienced:

> We pretty much spent a year and a half quarantined. And so, she really didn't have that much social opportunity outside of the people that she saw at my job. ... From a social standpoint, the year and a half of quarantine has been just terrible. It's been awful. Trying to go back to in-person school after a year and a half of being isolated was really hard on her social and emotional skills. …She had FaceTime with teachers and stuff, but her confidence with other kids just plummeted. …When we went back to in-person school, I mean, she was just a mess. …She has anxiety, and that has kicked in with fight or flight, fight mostly. And so, the end of the school year did not go so well when we were back to in-person school.

Jessie described similar difficulties for Riley due to ongoing pandemic-related protocols:

> It was weird. He had a big spike in anxiety, not when he went back to school, but when most of the other [nondisabled] kids came back to school. …When the other kids came back, and he still couldn't, like, touch them. It really made him upset.

Participants also described instances when inclusive education with nondisabled peers was enhanced by non-traditional education. For example, Ali described:

> I don't really know what it is like for her in person, but I feel like with the virtual, her teacher did a really good job of making sure that Marie was included. They did breakout rooms, and Marie would be expected do the work. Her classmates were awesome. They were like, “Marie, what do you think?” And they would try to engage her as much as they can, or as much as she wanted to be included.

Ali was able to listen to what was happening through the screen since Marie was learning from home. Jillian also enjoyed being present for Zoe’s remote instruction and described supporting her to be even more included and engaged than during in-person instruction:

> She probably got more inclusive education because I was sitting right here and would encourage her to raise her hand and I would stick my hand in the window, so the teacher knew to call on her, and I’d stick my face in the window so the teacher knew to call on her. So, I think she actually got more participation with the class because a lot of times, she knows the answer or she has something to contribute. They just don't always allow that to happen, or she doesn't feel like she can because they've got her so trained to just sit in your desk and, you know, mind your business that she doesn't feel like she can.

Unexpected Benefits of Non-Traditional Education: “I was able to see what they were doing.”

Despite the immediate and ongoing problems of non-traditional education for students with ESN and the personal toll it took on the participants, most participants (*n*= 7) highlighted several positive aspects and indicated recommendations for the future. Participants reported having found new ways to be engaged with their child's education and more insight into their needs and instruction. They pointed to the increased access to this information about their children's curricula predominantly via Google Classroom or Drive. In fact, one participant (Jessie) had asked pre-pandemic about accessing this for her son and was denied by school professionals after they consulted with their district's lawyers. Thus, the ubiquity of shared online access to information across the school and home settings during non-traditional instruction appeared to be a clear benefit to participants. Rachel attributed her ability to support Jean in remote instruction to this access: "I could see what his special education teacher was working on, and I could see what the assignments were. … I think just knowing what he was doing really helped us support him better." Ali described similar benefits of this new access:

> I was able to see what they were doing. And when they had homework posted, I was able to know how they were approaching that in class. …That was super helpful for me because when she's in school during a regular time, I don't necessarily see all that and it's a lot harder to know what they're doing and a lot harder to help her with her homework because I want to be consistent across all settings and when you don't really know what's going on, it's hard to be that way.

Participants shared that increased communication and collaboration with school professionals emerged as another benefit, though not for all participants and typically with special education teachers and related service providers only. For example, Jessie reported that "there was much more of a team feeling; it was less us versus them, [and more] like we had to work together. We had to communicate a lot, and we all had to realize what effort people were putting in and had to appreciate that more." While Barbara communicated regularly with school professionals, it reflected the lack of inclusive education opportunities for Ruby: "The big word that I would use to describe what this year was like would be exclusion, meaning I was in regular contact with special educators and therapists and never in contact with regular educators." Alternately, Rachel described increased access to the general education teacher:

> So, there was a huge increase in communication and accessibility of the general education teacher primarily because we could [communicate] during the day if there was an issue. I could ask her to meet with me online, and she could take a few minutes and we could sort of problem-solve something that was happening in the classroom.

Noelle suggested, however, that too much communication was overwhelming and contributed to the excessive demands put her during non-traditional education: "It creates a feeling of I'm going to miss something if I missed that one text. I've got this constant anxiety around what am I missing from the school because the communication comes in so often."

Some participants found that non-traditional education was beneficial to the degree that it facilitated their children's learning of various computer skills. Jessie indicated that her child "learned a little bit more about how to navigate a computer and start a session [and] end a session and that sort of thing. And those were skills that he gained that he probably wouldn't have otherwise." However, it should be noted that participants seemed reluctant and almost resentful to admit these increases in computer skills due to all the other challenges they and their children experienced. For example, Noelle stated, only after a long pause, "He [Gabe] learned how to navigate a computer more than I think he would have. That's what I got." Similarly, Jillian qualified her statement regarding these benefits:

> I would say the only thing she benefited [from] was that it really improved her computer skills somewhat. …She was forced to do more typing so that has improved. It's made her more comfortable around a computer, which is, I mean that's the future so that's good.

Lastly, several participants pointed to increased accessibility of parent-to-parent support due to the ease of virtual meetings. Pre-pandemic, while many participants might have wanted to support other parents/caregivers, they were unable to attend the in-person IEP meetings due to childcare or other responsibilities. Since meetings were mostly held virtually during the pandemic, participants noted that not only did it make it easier to attend their own child's meetings, but they were also able to attend others' meetings. Rachel described this benefit:

> Having online meetings, I wouldn't want to go to that model completely, but it did allow for us to just be completely there. Whereas usually, we have to find early childcare for my other children. It's just a complicated process. But one thing I noticed was that there was a lot more parents were able to get support, parents that, you know, a lot of parents would reach out to me just to have another parent in the room.

She continued, "I didn't ever do it, but lots of friends were able to get extra support during IEP meetings, and they were just more accessible. But for us, they were more convenient."

Discussion

This study was designed to answer a question about successful approaches and needed solutions to non-traditional education for students with ESN. Knowing about the instructional needs of students with ESN, we wanted to learn, from the perspective of parents or caregivers, what their children's education programs looked like and what they thought about the services they received. We hoped this information might provide insight into practices that should be considered for continuation, regardless of where educational services are provided or in case a situation requiring non-traditional education occurs in the future.

The findings indicated that non-traditional education was insufficient to meet the educational and related service needs of participants' children and that it placed responsibility on the parents, most of whom were struggling to complete their work responsibilities at the same time. While many families across the country faced this struggle, students with ESN could not be left on their own to attend to and participate in remote meetings, complete asynchronous work, or navigate virtual platforms in comparison to their non-disabled peers. Participants' responses also pointed to the difficulty their children had given the instruction was not provided by trained professionals. Not only did they not feel they had the time to teach their children, but they also did not feel competent to do so. Further, their children did not view their parents as their teachers, and consequently, did not want to engage in instruction with them. Ultimately, non-traditional education for the participants' children did not reflect evidence-based practices for students with ESN (e.g., Browder et al., 2014), did not facilitate their children's engagement, and resulted in an unfair burden on participants. These findings confirm concerns about non-traditional education for students with ESN regarding the challenges of translating highly individualized services and support to a remote instructional format and the increased demands on families to meet their needs without adequate school support (Hanreddy, 2022).

The need for specialized instruction and related services for students with ESN is clear (Browder et al., 2014, Brown et al., 2019). Evidence of the need for specialized training to provide specialized instruction and related services is found in the numerous institutions of higher education that prepare teachers who are "highly qualified", as required by federal law

(NCLB). While parents' contributions to their children's education are critical (Browder et al., 2014; Newman, 2005), most are not "highly qualified" to provide free, appropriate education.

The findings also indicated that video conferencing platforms (e.g., Zoom, Google Meet) were difficult for students with ESN to access. The platforms require navigation to log in, which some children learned to do, but most others could not do so independently. Further, the pacing and virtual nature of the platforms interfered with their ability to observe and interact with other students who, in person, would have served as peer models and supports (Browder et al., 2014). There is clear evidence of the effectiveness of peer-mediated interventions (e.g., peer support, peer modeling) for students with ESN (Brock & Huber, 2017). Still, that research is focused on in-person modeling, and not peers in small squares on a computer screen. In addition, it is only verbal modeling that is provided via video conferencing formats; the participants' children could not observe or interact with their peers as they would in the classroom. The findings highlighted decreased inclusive education and increased social isolation, confirming challenges faced by students with ESN and their families during non-traditional education (Hanreddy, 2022).

The limitations of video-conference platforms seemed also to be a significant barrier to student engagement. Participants reported that their children learned better when provided with concrete materials by teachers and therapists, particularly when the materials were tailored for their children's use. Manipulatives have long been recommended as critical to aiding students' learning (Jimenez & Stanger, 2017). It was not surprising, then, that the two-dimensional nature of video conferences was not well suited for the participants' children. However, one benefit of the video conference platform participants emphasized was that it facilitated their participation in IEP meetings. Remote access eased the burden on families by eliminating travel and the need for childcare, and it enabled the involvement of others to support each other in the meetings.

Limitations

Several limitations of this study are worth noting. First, despite our efforts to recruit a culturally and linguistically diverse sample, most participants (n=7) identified as white and not Hispanic or Latinx. Second, study participants noted having access to abundant resources (i.e., monetary resources to access professional support). It is likely that non-traditional education was experienced in different ways for families who did not have access to such resources. Third, we interviewed a handful of families from three states, all of whom had different state- and local-level policies related to non-traditional education. An argument could be made that we have not adequately explored the variation within state- and local-level responses to the pandemic. Finally, the study did not include the voices of students with ESN. Subsequent research might expand participants to include students with ESN and teachers to gain more comprehensive understandings from a variety of perspectives. As such, the outcomes of this study are a first step toward understanding parents' perspectives and experiences with non-traditional education to foster greater support and more effective online systems for parents and their children with ESN.

Implications

We conducted this study to gain insights to non-traditional education of students with ESN in case of a similar situation in the future. What we learned has implications for practice, regardless of whether services must pivot again. These implications may contribute to improving in-person inclusive education for students with ESN (Hanreddy, 2022; Wehmeyer et al., 2016).

It became clear that the online platforms used were viewed as an ineffective method for students with ESN, particularly in the absence of well-designed lessons and use of manipulatives and concrete materials. This points to the need for the exploration of alternative forms of education. For example, some research has demonstrated the effectiveness of virtual reality in teaching various skills to individuals with intellectual disabilities (Nabors et al., 2020). At least, synchronous remote instruction should include structured lesson plans and in-home supports, such as paraprofessionals and concrete materials (Browder et al., 2014; Hanreddy, 2022).

Additionally, the study highlighted the need for more communication between home and school regardless of the educational setting or circumstance (Browder et al., 2014; Hanreddy, 2022). Parents described benefits of accessing Google Classroom and Zoom meetings, resulting in their being better informed about what their children were doing. Consequently, this access could increase the possibility of additional learning support being provided by families at home even when students are in school buildings, and likely increase the generalization of knowledge and skills from school to home. Further, had parent training been provided – common in the provision of early intervention – parents would likely have felt better able to support their children's learning. It is also possible that the children would have accepted their parents as teachers more readily. One practice that should be strongly considered is the continued use of video conferencing platforms for team meetings. Parents in this study pointed to its benefit, and professionals' perceptions of video conferencing were also positive (Scheef et al., 2022).

While it is understandable why there was no advance planning for non-traditional education in response to the COVID 19 pandemic, one important implication is that schools should be prepared for the likelihood that this could reoccur. Among the other emergency preparedness procedures that are in place in schools (e.g., fire drills, active shooter drills), plans should be developed that include the use of a variety of non-traditional education and related service delivery methods that are appropriate for students with ESN and supportive of families. These plans should be developed collaboratively with families of children with ESN and include professional development for all school professionals (Hanreddy, 2022).

References

Bogdan, R. C., & Biklen, S. K. (2004). *Qualitative research for education: An introduction to theories and methods (4th Ed.)*. Allyn and Bacon.

Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71*(2), 195–207. https://doi.org/10.1177/001440290507100205

Brock, M. E., & Huber, H. B. (2017). Are peer support arrangements an evidence-based practice? A systematic review. *The Journal of Special Education*, *51*(3), 150–163. https://doi.org/10.1177/0022466917708184

Browder, D. M., Wood, L., Thompson, J., & Ribuffo, C. (2014). *Evidence-based practices for students with severe disabilities* (Document No. IC-3). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: http://ceedar.education.ufl.edu/tools/innovation-configurations/

Brown, F., McDonnell, J., & Snell, M. (2019). *Instruction of students with severe disabilities (9th edition).* Pearson.

Courtade, G. R., Test, D. W., & Cook, B. G. (2015). Evidence-based practices for learners with severe intellectual disability. *Research and Practice for Persons with Severe Disabilities, 39*(4), 305-318. https://doi.org/10.1177/1540796914566711

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Sage.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* Sage.

Hanreddy, A. (2022). Distance learning and students with extensive support needs: (Re)Defining access to education from a distance. *Inclusive Practices, 1*(1), 33-38. https://doi.org/10.1177/27324745211014154

Jimenez, B., & Stanger, C. (2017). Math manipulatives for students with severe intellectual disability: A survey of special education teachers. *Physical Disabilities: Education and Related Services*, *36*(1), 1–12. https://doi.org/10.14434/pders.v36i1.22172

Lauterbach, A. A., Bettini, E., Morris Mathews, H., Rossetti, Z., & Hughes, O. E. (2022). Beyond exploratory: How varied qualitative methodologies can inform and advance the field of special education. In T. W. Farmer, E. Talbott, K. McMaster, D. Lee., & T. C. Aceves, (Eds), *Handbook of special education research, vol. 1*. Routledge.

Meckler, L. & Strauss, V. (2020, Mar. 20). For parents trying to replicate school for children with disabilities, a confounding task. *Washington Post*. https://www.washingtonpost.com/local/education/for-parents-trying-to-replicate-school-for-children-with-disabilities-a-confounding-task/2020/03/19/8a1e2876-6940-11ea-9923-57073adce27c_story.html

Nabors, L., Monnin, J., & Jimenez, S. (2020). A scoping review of studies on virtual reality for individuals with intellectual disabilities. *Advances in Neurodevelopmental Disorders, 4*, 344-356. https://doi.org/10.1007/s41252-020-00177-4

Newman, L. (2005). *Family involvement in the educational development of youth with disabilities*. SRI International. https://files.eric.ed.gov/fulltext/ED489979.pdf

No Child Left Behind Act of 2001, P.L. 107-110, 20 U.S.C. § 6319 (2002)

Rice, M. F., & Carter Jr, R. A. (2015). "When we talk about compliance, it's because we lived it": Online educators' roles in supporting students with disabilities. *Online Learning, 19*(5), 18-36. http://dx.doi.org/10.24059/olj.v19i5.581

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Scheef, A. R., Hollingshead, A., Raney, T., Malone, K., Goebel, E., & Hayes, J. (2022). School personnel perceptions of video conference IEP meetings. *Journal of Special Education Technology*. https://doi.org/10.1177/01626434221108888

Smith, S. J., & Basham, J. D. (2014). Designing online learning opportunities for students with disabilities. *TEACHING Exceptional Children*, *46*(5), 127-137. https://doi.org/10.1177/0040059914530102

Smith, S. J., Burdette, P. J., Cheatham, G. A., & Harvey, S. P. (2016). Parental role and support for online learning of students with disabilities: A paradigm shift. *Journal of Special Education Leadership*, *29*(2), 101-112.

Taub, D. A., McCord, J. A., & Ryndak, D. L. (2017). Opportunities to learn for students with extensive support needs: A context of research-supported practices for all in general education classes. *The Journal of Special Education, 51*(3), 127-137. https://doi.org/10.1177/0022466917696263

U.S. Department of Education. (2002, February 25). *Digest of Education Statistics, 2021*. National Center for Education Statistics (NCES) Home Page. https://nces.ed.gov/programs/digest/d21/tables/dt21_204.60.asp

Wehmeyer, M. L., Shogren, K. A., Kurth, J. A., Morningstar, M. E., Kozleski, E. B., Agran, M., Jackson, L., Jameson, J. M., McDonnell, J., & Ryndak, D. L. (2016). Including students with extensive and pervasive support needs. *Advances in Special Education, 31*, 129-155. https://doi.org/10.1108/S0270-401320160000031009

Table 1.
Participants

			Participants' children					
Name	*State*	*Race/ Ethnicity*	*Child*	*Gr./ sex*	*Diagnosis*	*Strengths/Interests*	*Inclusive education pre-pandemic*	*Related services pre-pandemic*
Kelly	VA	White; NHL	Ben	5/M	ASD	Happy, social, flexible. Loves music, babies, tv.	Specials only, with para	Counseling, OT, Para, Speech
Jessie	MA	White; NHL	Riley	4/M	Angelman syndrome	Persistent, charismatic, social. Loves music, arts & crafts, swimming.	Specials, recess, lunch, some academic lessons	BCBA, OT, Para, PT, Speech
Barbara	MA	White; NHL	Ruby	5/F	Down syndrome, ASD, ADHD, ODD	Loves school and learning, math, reading, sports.	65% time in general education class	APE, BCBA, Counseling, OT, Para, PT, Speech
Noelle	NC	White; NHL	Gabe	5/ M	Down syndrome	Outgoing, clever, strong. Loves routines, his sister, swimming, puzzles.	Specials only	OT, Para, PT Speech
Rachel	NC	White; NHL	Jean	5/ F	Down syndrome	Quirky, funny, curious. Reads well, good self-care. Loves math.	General ed. 40-79%; pulled for academics and related services	OT, Para, Speech
Ali	NC	White; NHL	Marie	3/ F	Down Syn. ADHD, anxiety, apraxia	Loves music, musicals, sports, and playing outside.	General education class; Resource room for academics	Audiologist, OT, Speech
Jillian	NC	White; NHL	Zoe	3/ F	Down syndrome	Social, verbal. Loves animals, space.	General ed. 40-79%; pulled for academics and related services	OT, Para, Speech
Joy	VA	Asian; NHL	Aidan	3/ M	ASD	Recognizes patterns and colors. Likes spelling.	Morning meeting and art only	APE, OT, Speech

Note. Gr.=Grade; MA=Massachusetts; NC= North Carolina; VA= Virginia; NHL=Not Hispanic or Latinx; M=Male; F=Female; ASD= Autism Spectrum Disorder; ADHD=Attention deficit hyperactivity disorder; ODD= Oppositional defiant disorder