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Delivering Instruction During the Pandemic: Insights for Special Education Administrators and Teacher Preparation Programs

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Abstract

This study examined considerations for delivering online instruction and related services to students with disabilities. The purpose of the study was to uncover teachers' reflections about their experiences with online learning for students with disabilities as a response to COVID-19. We used an online open-ended survey to collect reflections from practicing teachers, who were graduates of a special education program at a university in Florida. Our findings highlighted challenges and unanticipated benefits of online service delivery. We discussed how administrators should streamline instructional-delivery platforms and procedures for teachers, students, and families. We recommended ensuring that Individualized Education Planning (IEP) teams consider priorities for future pandemics and natural disasters.

Keywords: Online learning, special education teachers, students with disabilities, COVID-19, administrators.

التعليم أثناء الجائحة: إضاءات لمديري مدارس وإدارات التربية الخاصة وبرامج إعداد المعلم

مستخلص البحث

هدفت هذه الدراسة إلى التحقق من اعتبارات التعليم عن بعد والخدمات ذات الصلة للطلاب ذوي الإعاقة. كما كان الغرض من الدراسة هو الكشف عن تجارب المعلمين مع التعليم عن بعد مع الطلاب ذوي الإعاقة أثناء جائحة كورونا-COVID-19. تم استخدام استبانة إلكترونية مفتوحة لجمع البيانات من المعلمين الممارسين خريجي برنامج إعداد معلمي التربية الخاصة في إحدى جامعات ولاية فلوريدا بالولايات المتحدة الأمريكية. أبرزت النتائج التي تم التوصل إليها عن التحديات والفوائد غير المتوقعة لتعليم الطلاب ذوي الإعاقة عن بعد. بناء على نتائج هذه الدراسة تم مناقشة ما يجب على المسؤولين اتخاذه حول تبسيط الأنظمة، والإجراءات للمعلمين، والطلاب، والأسر. كما تم مناقشة بعض التوصيات حول فرق التخطيط التربوي والنظر حول الأولويات في التعليم عند حدوث الأوبئة والكوارث الطبيعية في المستقبل.

الكلمات المفتاحية: التعليم عن بعد، برامج إعداد المعلمين، معلمي التربية الخاصة، الطلاب ذوي الإعاقة، كورونا.

Introduction

It is important for the field of special education to consider how the long-term implications of the global COVID-19 pandemic relate to preexisting issues in teacher preparation and professional development. Since the Education for Handicapped Children Act in 1975, seemingly intractable issues grounded in cultural, linguistic, and disability-related inequities have plagued the field of special education. These complex issues include, but are not limited to, inappropriate testing and eligibility determinations, exclusionary placement and instructional practices, disproportionate behavioral consequences, and a lack of collaboration with other professionals and families (Artiles et al., 2010; Danforth & Naraian, 2015; Gallagher et al., 2014; Kleinhammer-Tramill et al., 2012; Paul, 2002; Sailor, 2014). Recent Fast Facts published by the Office of Special Education Programs (2020) indicate that these challenges remain problematic, and that logic dictates that they will be exacerbated by the necessities and new realities of virtual or blended schooling created by the COVID-19 pandemic.

Just before the pandemic, the Council for Exceptional Children's (CEC) state of the field survey indicated several significant developments in the field of special education over the last 20 years, specifically:

Increasing diversity within student populations, fuller implementation of inclusive practices, expanded use of evidence-based practices, greater emphasis on collaborative teaching approaches, a growing emphasis on access to the general education curriculum, and accountability for the learning of students with exceptionalities are among these changes. (Fowler, Coleman & Bogdan, 2019, p. 10)

The positive developments noted in the CEC survey may be challenging to maintain as research priorities have shifted from issues of equity to accountability in the last decade. This was recently illustrated in a

study by Arden et al. (2018) examining frequently cited research in special education spanning 20 years (1993–2013). Their study found that content topics and evidence-based practices, such as reading and behavior, were most prevalent during the most recently reviewed decade (2003–2013). This finding indicates a shift away from research focused on issues of equity and inclusion. Recent cultural upheavals and the necessities of virtual schooling have pointed to the need for researchers and leaders to refocus on these issues as they work to prepare and retain special educators and to ensure that equitable services are provided to students with disabilities.

In general, people with disabilities (particularly those living in urban areas) are considered a vulnerable population because they are more adversely affected by natural disasters and public health emergencies. As stated by Pineda and Corburn (2001),

[P]ersons with disabilities (PWDs) living in cities during the COVID-19 pandemic response may be four times more likely to be injured or die than non-disabled persons, not because of their “vulnerable” position but because urban health policy, planning and practice has not considered their needs. (p.1)

It follows that appropriate planning for and access to online instruction and services for students with disabilities are complicated and possibly overlooked. This situation is especially fraught when considering the compounding challenges of students with medical or therapeutic needs or who are experiencing homelessness, foster care, or incarceration (Reich et al., 2020). Given this, we undertook this study out of concern for the specialized needs of children with individualized education plans and for the type of structured learning environments some students with disabilities need. Further, we wondered how teachers were coping with the new responsibilities and remote delivery of instruction. Thus, the purpose of the study was to solicit teachers’ reflections about their experience with online

learning for students with disabilities as a response to COVID-19. We addressed the following research questions:

1. What are teachers' reflections about their experience with online learning for students with disabilities as a response to COVID-19?
2. What are teachers' perceptions about how they met the needs of students with disabilities?

Literature Review

Special Education Delivery During the Pandemic

As schools closed because of the pandemic in the spring of 2020, teachers, children, and parents found themselves in an unusual situation. According to Masonbrink and Hurley (2020), “[n]ationwide closures of elementary and secondary schools due to the novel coronavirus (COVID-19) have severed nearly 60 million students from critical educational and health resources” (p. 1). A large number of students from poor socioeconomic backgrounds rely on schools and their services for educational, nutritional, physical, and mental health needs. Most of the discussion in the media continues to be more broadly focused on economic issues facing the country and on ways the government and Congress can alleviate the difficulties many businesses and citizens are facing. Missing in the discourse and during the passage of the Coronavirus Aid, Relief, and Economic Security (CARES) Act were “measures to mitigate risk for educational and health disparities among children for whom services have been woefully lacking” (Masonbrink & Hurley, 2020, p. 1). Of the \$2 trillion dollar CARES Act, \$30 billion dollars were allocated to education, with K–12 schooling getting half, with no funding allocated to remote-learning professional development for teachers (Masonbrink & Hurley, 2020).

Studies of how teachers are managing to teach remotely during the pandemic are scarce. In one study, livari et al. (2020) documented “the

digital transformation initiated by the COVID-19 pandemic in the basic education” in Finland and India (p. 2). Two teachers of students with special needs in India spoke about some of the ways they stayed connected with their students. They used their own phones and WhatsApp to stay connected with parents, sending lesson plans for parents to follow. The other teacher in the study used Zoom live sessions with her students with disabilities. Some of the sessions were one to one and others in small groups. Both teachers reported having to negotiate with parents to set times for video conferencing. Additionally, one teacher reported that the teachers evaluated the activities daily, and they created a report for all of their students and sent it to school administrators every workday. One teacher in Finland noted that the biggest challenges were with students who needed enhanced support for activity control but did not have adults at home to provide that support. Students with special needs had difficulties, for example, in waking up, and some had too many stimuli at home that made concentrating on live remote lessons difficult. According to Livery et al. (2020), the “special needs teacher helped these children by waking them up by phone calls and guided them through live video sessions and sometimes helped in tasks using video connections” (p. 3). Teachers in both countries reported the extensive work that teaching online entailed, and they could not contact some students, especially those from poorer socioeconomic backgrounds.

Supratiwi et al. (2021) conducted a recent study in Indonesia surveying 226 special education teachers (SETs) to learn about the challenges they faced when attempting to teach using distance learning. The researchers found that most of the SETs (66%) experienced barriers to teaching that came from parents, students, and other teachers. The drawbacks of distance learning include boredom and lack of student ability, wifi issues and disruptions in energy that cause technology to shut down or not work properly, lack of parent communication and time spent

accompanying their student with the work (Supratiwi et al., 2021). SETs also shared that there were “difficulties in adapting material to online learning, difficulties in monitoring and evaluating student progress, and the lack of direction and coordination from schools” (Supratiwi et al., 2021, p. 64).

In a similar study, Denisova et al (2020) surveyed 230 students with disabilities to learn how they felt their learning was affected by distance learning during the Covid-19 pandemic. Denisova et al. (2020) share that, “that the problems of the socio-psychological (low self-motivation and self-organization, fatigue, low mood, lack of live communication) and technical (the problems with the Internet communication and distance learning platforms) come to the fore” (p. 1). Pearson et al. also emphasizes the challenges of distance learning due to a lack of collaboration between students, and the prevalence of hands-on and field activities (2019). These challenges can be significantly increased in the area of STEM education because cooperative learning and collaboration are a huge part of teaching in this area (Pearson et al., 2019).

Another popular theme has been the lack of pedagogical skills of parents to teach their children at home and an increased appreciation for teachers and their work. Social media has been inundated with mothers and fathers feeling frustration at the sudden predicament. When schools shifted to remote learning, issues of inequity in education became more pronounced as the pandemic made clearer the disparities in access to technology for different groups of students and their families.

Lost in most of the discourse were concerns about students with disabilities and how schools and teachers were meeting their educational needs. In the United States, 13% of public-school students have a disability requiring an individual education plan (IEP), with students from low-income communities identified at twice that rate (DeBrey et al., 2019). The overwhelming majority (80%) of children with mental and behavioral health

needs rely on school-based services (Masonbrink & Hurley, 2020). Journals such as the *Lancet* and *Pediatrics* have sounded the alarm on the negative effects that school closures have on students with mental health and special education needs.

Students with disabilities need intensive, individualized interventions that (a) are specifically designed to address persistent learning or behavior difficulties, (b) are implemented with greater frequency and for a longer duration than what is commonly available in a typical classroom or early intervention setting, and (c) require that personnel across multiple disciplines have knowledge and skills in identifying and implementing a wide variety of evidence-based interventions. Schools are finding themselves unprepared to address the needs of this growing population of students. In the midst of this significant increase in student enrollment, many states face a dramatic increase in requirements for special education personnel (including teachers and school psychologists) to be fully trained in evidence-based best practices (Wong et al., 2014; Lesh et al., 2017). Writing on the consequences of COVID-19 for students with special needs in England, Crawley et al. (2020), reported as follows:

Children with special educational needs and disabilities should have the special provision required to meet their particular needs specified in their Education Health and Care Plan (EHCP). This has not necessarily been adapted for home learning and many EHCPs specify provision that cannot be delivered outside of specialist settings. Similarly, much of the wider support normally available to disabled children and other vulnerable learners is provided through facilities that are now closed and unlikely to be effectively replaced by efforts of volunteers. (n.p)

Brewer & Cartagena (2020) highlight some of the positive sides to e-learning or distance learning. One aspect is the ability to leverage collaboration with use of technology tools like Flipgrid and Padlet. They also

point out the flexibility some teachers can provide by giving students free choice on how they demonstrate their learning. Many technology platforms also include accessibility features like text-to-speech, screen magnification, and highlight/color features to support SWD viewing of the content (Brewer & Cartagena, 2020). Technology also offers a space for SETs to use strategies supported by the UDL framework.

France (2020) shares a list of Tips for Teaching From A Distance which include “cultivate self-awareness in students by challenging them to identify their obstacles” (p.19), “center emotional well-being” (p. 31), “embrace a project-based approach” (p.58).

Clearly, there is a need for studies to focus on virtual instructional pedagogies and on related special education services. However, the more pressing concern is how to address the issues of inequity that are exacerbated by the pandemic. Considering the COVID-19 threat that schools and families of students with disabilities continue to face, in this study we focus on special education teachers’ reflections on their experience of online teaching and on how they met students’ needs. This will help the field better understand some of the issues teachers are facing and some of the practices they considered to work well in meeting the needs of students.

The important role of teacher perspectives in informing the policy and practice of schools is well-established (Mills et al., 2020), as are the perspectives of school leadership (Anast-May et al., 2011; Wasonga, 2010), which are especially critical during the pandemic (Hamilton et al., 2020; McCullough et al., 2020). Teachers’ perspectives can inform the role principals play in creating schools that are responsive to students’ diverse learning pathways (Toll, 2017). The capacity of schools and teachers to be proactive and responsive requires that schools, under the leadership of principals, develop not only their structures, policies, and practices, but also the underlying philosophy of the school and the attitudes and beliefs of staff (Salisbury, 2006).

Method

We constructed a short, open-ended survey to collect teachers' reflections about their experience with online learning for students with disabilities as a response to COVID-19. We administered the online qualitative survey to practicing teachers who were graduates of a special education program at a university in Florida because this group of teachers were covered by a current Institutional Review Board approved study. We designed the survey to capture succinct responses from teachers (McCullough et al., 2020) about their practice during the pandemic. The questions demonstrate their pragmatic nature. The survey aided us in answering the research questions of the study.

The Voices of Teachers: Delivering Special Education During COVID-19

Participants in the project were graduates of a special education program at a university in south Florida. We used opportunistic sampling to recruit them (Palinkas et al., 2015) from the special education program via email distribution in Qualtrics. The only information known about the participants was that they were recent graduates (within 5 years) of the special education program. This program was not designed to prepare teachers to serve students in virtual settings, so unless provided by their school district employers, it was presumed that the participants would have received little to no preparation for teaching online during the pandemic. This software securely manages responses (including opt-outs) and follow-ups. We invited teachers to voluntarily complete the survey, but we realized quickly that teachers were experiencing technology "burn out" (Al-Fudail & Mellar, 2008) during the end-of-school-year time frame when the survey was distributed. As a result, the response rate was low, with only nine respondents out of 123 taking part in the study. In order to increase participation, reminders were sent through Qualtrics and the survey closing window was extended by an additional month to allow for teachers to complete the survey. The completion rate of the returned surveys was 89%.

The generalizability is limited due to the low response rate. The participants responded to the following open-ended questions:

1. Describe any prior experience you have teaching online.
2. How are you serving students with IEPs?
3. Describe how you meet the IEP goals and services for this group of students?
4. Please provide specific examples for students with different disability eligibility.
5. What are some of the challenges that you have faced while transitioning to online platforms?
6. How have parents and students responded to the changes?
7. In considering how to provide services when teaching online, what recommendations do you have for Special Education teacher preparation programs?

We analyzed survey data using both manual and electronic coding. All researchers conducted an initial read of the data set to determine if the responses told a story and to assess whether, given the low response rate, the findings would be valuable to the field. One of the researchers then performed two rounds of coding using MaxQDA. The first round consisted of descriptive coding, which is thought to be useful for all qualitative studies and involves “tagging” the data with nouns or short phrases (such as challenges, lessons learned, and engagement) to describe what is going on (Saldaña, 2016). This coding produced an inventory of the data and allowed for identification of common themes, which the researcher developed during a second read of the data. These themes and key quotes were then reviewed with the other researchers in order to triangulate and verify the identified themes.

Findings

Survey respondents identified their responsibilities as including responding to the emotional concerns of students and families. They described the challenges of virtual teaching and noted the inequities that existed while transitioning to teach online during the pandemic. Upon our review of the survey responses, it became clear that respondents realized some unanticipated benefits, which we will also highlighted below.

Theme 1: Responsibilities—Meeting the Needs of Students with Disabilities during COVID-19

Respondents indicated that they performed a range of responsibilities and services in their new roles as virtual special-education teachers. All mentioned providing services required by students' IEPs. However, this task was portrayed differently by the teachers. Some provided individualized academic lessons or small-group instruction for students with IEPs as a supplement to the general education instruction. Some prerecorded their lectures or designed materials to supplement instruction or to address specific IEP goals. Other teachers provided social and life skills to their students as dictated by the students' IEPs. (It is important to note that it was unclear if providing social and life skills lessons was in lieu of providing academic support.) Some provided additional practice materials, such as videos, to help their students succeed in general education classes. As the roles of special education teachers varied significantly, respondents described providing services to a variety of students as characterized here:

My students who have an eligibility of Specific Learning Disability, most get extra small group time, individualized instruction, extended time, highlight writing. For my student with a developmental disability, I provided lots of simplified text, pictures, routines, hands on learning, real life representations.
(6/10/20 12:44:36, Pos. 11)

One teacher even voluntarily visited students at home (with permissions and consents) to provide instruction. Most teachers made daily use of platforms such as Zoom, Edsby, or Google Classroom. Many indicated that by providing these services they were offering emotional support to the students and families who were able to participate. Respondents reported what they noticed about how families and students were reacting emotionally, particularly noting that students missed the classroom and that parents developed a new appreciation for teachers during this time. A few of the more positive comments can be characterized by the following quote:

The students enjoy Zoom. It is the only normalcy they have right now. They constantly say that they miss being in the classroom. The parents have also adapted, and we all communicate MUCH more. The parents have definitely seemed happier that they see growth happening within their homes and very appreciative of all that we have been accomplishing in sessions. (5/14/20 08:24:08, Pos. 14)

However, the emotional responses were varied; and one respondent put it simply: "Parents have been stressed, and students have been missing their classmates." (6/10/20 12:44:36, Pos. 14). Another noted that students and parents were, "Not well. It's constant communication and that in itself is exhausting" (5/16/20 20:48:22, Pos. 14). Additional challenges were described in more depth by the teachers.

Theme 2: Challenges of Providing Virtual Special Education Instruction and Services

Lack of Training and use of Multiple Platforms. Among the many challenges our respondents faced, the most frequently cited were the need for training on the school districts' virtual platforms and the need for a consistent platform for all teachers. As one teacher pointed out,

Often, when working with students, there are uses of multiple

platforms being used at once, and multiple sites, making it confusing for the students and myself as the [Special Education] teacher as I am providing the supports to complete the assignments provided by the general education teacher. (5/14/20 08:24:08, Pos. 12)

Another teacher attempted to quantify the impact of such a variety of platforms:

There are a lot of platforms that surfaced during this time but it made it very overwhelming. My general education students that have IEP's had to figure out how to use 10-20 different platforms. Each of their teachers wanted to use 1-4 platforms. They were overwhelmed and quit before even beginning. I think it is great that there are so many platforms we can use but it was confusing for many. (5/27/20 15:38:56, Pos. 12)

It is important to note that the stress of multiple platforms likely was related to student participation and to the emotional responses of students and parents. This is evident in the quote above, which points out that many students quit early in the term because of the overwhelming variety of platforms used by their teachers. The need for professional development on how to use virtual learning technologies appeared in the responses of almost all of the teachers. They expressed a need to develop expertise with each of the platforms being used by the general education teachers. Further, one new teacher responded to the survey as follows:

I am a new first year teacher, I am accustomed to the traditional setting. Prior to becoming an educator who serves students with an IEP, I did not have any experience in this. However, I needed to be highly responsive and quick in adjusting to the new way of learning. Most of what I have learned has only come through conversations with others who knew how to use zoom, and

through trial and error. Many of the district trainings filled up immediately and I was unable to participate in those. Much of what I can do now has been through my own learning, and ideas in which I can incorporate into my zoom sessions. (5/14/20 08:24:08, Pos. 9)

Paperwork. The special education teachers indicated that paperwork was a barrier to virtual teaching because it took time away from being able to learn about the platforms and virtual teaching tools. One teacher indicated as follows:

I noticed that I have to do more paperwork to 'prove' that I am working. Everything has to be documented. My school requested that we turn in our documentation and add it to the cum file of each student. This is a lot of paperwork and is very time-consuming. I work late on weekdays and work on weekends to try and stay up to date with my documentation and lessons. (5/27/20 15:38:56, Pos. 12)

Another contended that paperwork impaired her ability to provide instruction and learn about the new approaches that were emerging, “I would have loved to learn about some platforms but due to paperwork, I wasn't capable of doing so. Require all teachers to only be able to use one or two platforms to not overwhelm students” (5/27/20 15:38:56, Pos. 15).

Participation. Respondents also varied in terms of reporting the participation of the families and students with whom they worked. One noted as follows:

I have some families that said they were not going to participate at all in eLearning, and they didn't. I have some families that I can tell the parents are doing all of the work for the student. Then I have some that the students are working very hard to

keep up to date with assignments and turn it in. It doesn't seem to be very consistent. (5/27/20 15:38:56, Pos. 14)

Another observed that students were not consistent with attendance or were just not doing the assigned work. One attributed this to student perspectives: "Some love being home while others would rather be in the classroom" (5/27/20 07:46:45, Pos. 14). Another noted that "It is extremely difficult to engage students in the learning process without the structure of being at school. Not all of my students have supportive parents" (5/21/20 08:02:46, Pos. 12).

Not all families had the time, resources, or ability to participate in or support their children in virtual schooling. This was particularly challenging with students who had more complex needs, "My students that are lower functioning need constant support from a parent. I used typing.com to practice their typing skills and was able to monitor their progress. I tried doing Zoom lessons, but I did not have any participation" (5/27/20 15:38:56, Pos. 10).

In summary, the special educators reported challenges of multiple platforms, burdensome accountability paperwork, and lack of student participation or family support. Although these logistical challenges were important, the teachers also pointed out a few inequities and unanticipated benefits that need to be addressed.

Inequities. Teachers described inequities in terms of technology provided by the district and the availability of parental support. As one teacher explained, "Students also lack the required technology to access distance learning, and the school did not send out the chrome books we have" (5/21/20 08:02:46, Pos. 12). Another shared that, "Many parents were upset that the school did not provide laptops" (5/21/20 08:02:46, Pos. 14).

The challenge was greater for parents with multiple children, "It has been tough for them. A lot of parents are having a hard time getting their

students online, especially when they have more than one” (5/14/20 07:37:52, Pos. 13-14). For families with children having more intensive needs, the steps necessary to complete work via computer are difficult. This points to the increased need to plan for providing assistive technologies as well as support for their implementation:

I video my lessons and post them to our online portal, Edsby. Students follow along on my lessons and complete the work. They either print the worksheet or write on a piece of paper. My students that are lower functioning need constant support from a parent. I used typing.com to practice their typing skills and was able to monitor their progress. I tried doing Zoom lessons but I did not have any participation. (5/27/20 15:38:56, Pos. 10)

Theme 3: Unanticipated Benefits

Although the challenges faced during online learning were difficult to navigate and often led to a lapse in access to learning for students, teachers did notice a few unanticipated benefits during the shift to e-learning. Teachers reported unexpected benefits in how they worked with parents and students as well as in how new technologies assisted them in teaching content. One teacher noted that the switch to virtual classrooms made learning more tangible for some parents:

The parents have also adapted and we all communicate MUCH more. The parents have definitely seemed happier that they see growth happening within their homes and very appreciative of all that we have been accomplishing in sessions. (5/14/20 08:24:08, Pos. 14)

Another teacher indicated that individualizing behavior management for students worked well online, “One-to-ones (individual teaching sessions) have been great. Still learning stuff. I came up with digital learning rewards

with stuff they'd like. They earned points for participating, following rules, and completing work (5/27/20 07:46:45, Pos. 13). Teaching with new video conferencing technology was helpful, "When I discovered that I can connect an iPad pro to my Mac for zoom, my mind was blown! This was so helpful as it made teaching and writing out math processes much easier!" (5/14/20 08:24:08, Pos. 13). One teacher found ways to use technology that removed barriers for students:

I can implement all instruction through Microsoft's platform, from assignments to class meetings. I use Microsoft Forms to create assignments and post them to Microsoft Teams. Some teachers have been using Word, but not all students have this. Forms allow them to fill in answers directly.

In summary, the responses indicated that special education teachers, students, and families have a variety of needs during virtual teaching. Special education teachers clearly need training, and districts should use fewer platforms to make it easier for special educators to support students across a variety of classrooms and grade levels. The inequities related to a lack of process for determining needs and providing students and families with access to hardware, software, and learning or assistive technology—all involving support to address unique situations (children with intensive learning needs, multiple children, etc.).

Discussion, Recommendations, and Conclusion

The perspectives of special education teachers are important for enabling schools to proactively plan and implement educational services for students with disabilities, particularly those who have more extensive educational and therapeutic needs. This importance is multiplied when we add a layer of a global pandemic and shift to online learning for all students. Our discussion of findings from our survey revolves around (a) teachers' responsibilities, (b) challenges of providing virtual special education

instruction and services, including the lack of reference to related services, (c) the inequities that emerged, and (d) the unanticipated benefits of engaging in full-time virtual schooling during COVID-19. We conclude with recommendations for practice and policy that include the perspectives and needs of a population that often lacks the voice of students with disabilities.

Teachers' Responsibilities

The teachers participating in this survey indicated varied approaches to fulfilling their responsibilities for meeting the needs of students with disabilities. As noted in the findings, teachers seemed to choose what they were able to deliver for their students. Some provided accommodations for students or developed supplemental materials to accompany general education lessons, while others provided small groups or individual instruction on academic or life and social skills. We noted that students with more severe disabilities did not participate or that their families found it difficult to support them in learning online. These findings indicate potentially alarming disruptions in the delivery of services and access to instruction for many students. As teachers discussed the provision of services, it was easy to see how special educators can be spread thin in serving students with varying levels of need for support across multiple grade levels and subject areas.

Challenges

In terms of the practical aspects of delivering special educational services, the teachers in our study described the use of multiple platforms within their schools and grade levels and other challenges related to this issue. This was frustrating and time consuming for teachers as well as students and parents. The teachers indicated that some parents and students were able to figure it all out while others simply gave up and did not participate.

The need for system-wide uniformity and ease of access is paramount for special educators who serve students with different needs,

often in a variety of classes and grade levels. Additionally, using one or two platforms for all streamlines the process for students and parents because consistency and routine is helpful for students with disabilities, who often struggle with processing and organizing information. Teachers are responsible for ensuring that appropriate accommodations and behavioral supports are provided. They also are charged with designing specialized instruction in academics and with teaching skills of independent living and adjustment to social and emotional challenges. And they often coordinate the provision of related services. In order to balance and ensure these responsibilities are met, schools should streamline platforms and communication systems and provide adequate professional development for teachers. Pearson et al. (2019) stress the importance of SETs to be trained on distance learning strategies beginning in teacher preparation programs. “Integrating an inclusive approach to teaching and learning requires universities to embed and sustain practices that consider the diverse needs of students throughout curriculum design and delivery, bringing benefits to all students” (Pearson et al., 2019, p.4).

Regarding the provision of related services, Masonbrink and Hurley (2020) illustrated how the pandemic effectively severed the delivery of necessary services (educational, nutritional, physical, and mental health) for students with disabilities. In our small sample, only one teacher attempted to provide a more intensive level of services in-home for students. It is notable that this teacher visited the home voluntarily and with consent—not in response to guidance or directives from the school. Denisova et al. (2021) highlight the following recommendations to better support distance learning for SWD. “Considering the prevalence of the frustration impact of distance learning on students (both norm typical and those with disabilities), it is necessary to introduce systematic work on psychological support for participants in digital educational relationships (p.8).” It seems that the majority of special education teachers in this study were left to their own devices to determine what services to deliver and how they would deliver

them. However, the teachers noted that they were held accountable for documenting what services they were providing. Although this finding echoed livari's findings from Finland and India (livari et al., 2020), the teachers in our study indicated that the paperwork was excessive and detrimental to their ability to learn about and implement virtual instruction successfully.

Inequities

Although some accountability was reported by respondents, such as documenting the provision of services, some comments lead us to wonder about the school- and district-level accountability for addressing the inequitable distribution of technology, instruction, and services. In-home services consistently require significant funding, coordination, planning, and personnel investments. With the sudden shift to e-learning in mid-March 2020, the time and resources to make these changes successfully may not have been possible, resulting in reliance on volunteers to provide services, as noted by Crawley et al. (2020). It is important to recognize that such inequities disproportionately affect families of students with disabilities, and that 13% percent of public-school students have a disability requiring an IEP, with students from low-income communities identified at twice that rate (De Brey et al., 2019). As pointed out by Pineda and Corburn (2020), appropriate planning and resource allocation can alleviate many of the inequities that exist for vulnerable populations. The teachers in our study acted selflessly and stepped up to provide whatever was needed for their students during the pandemic. Even though none of the participants mentioned this, the fact remains that teachers used their own internet and other resources to ensure that teaching and learning took place. It again reminded us of teachers using their own money and resources to help students learn in and cope with difficult conditions.

Unanticipated Benefits

As teachers struggled to implement technology to meet the students' needs, they also derived benefits from online teaching. We labeled this finding as "unanticipated benefits" because at the onset of the study, we were concerned about teachers' ability to meet the students' needs and how they would be able to do so. Finding out that teachers were experiencing success and better communication with parents was a pleasant surprise for us and the teachers. As we noted earlier, a few of the teachers seemed pleased about the increased communication and collaboration with parents and the newfound parental appreciation for the expectations placed on teachers. This occurred at a time when many businesses shut down partially or fully, allowing some parents an opportunity to be home with their children. When considering this finding, we believe it shows more about the complexity of what schools are asking of parents when they request increased parental involvement and that many parents would if they could.

Beyond this, the teachers indicated that using different technologies actually improved their ability to demonstrate ideas and teach math and literacy concepts. Brewer & Cartagena explain, "Using the UDL framework as part of teacher education may lead to more effective teachers in the classroom who are ready to meet the needs of a growing diverse student population" (2020, p. 792). Teachers discovered tools such as Google Forms for students to submit assignments. Within weeks of converting to virtual schooling, organizations and social media groups compiled lists of educational tools and resources that were previously unknown or underutilized by educators. We hope that many of these technologies will become a new way of work—particularly videoconferencing technologies to host parent–teacher conferences and IEP meetings. This mode of parent communication and collaboration has the potential to provide families with access to participate in their children's education planning while alleviating many of the challenges such as scheduling, transportation, and childcare.

Looking to the Future

The COVID-19 pandemic has shed light on the wide range of procedures in every field that need to be in place for future pandemics (Dey et al., 2020; O'Byrne et al., 2020; Pineda & Corburn, 2020). Budget challenges within schools will have an impact on what schools are able to provide to students with disabilities, especially in challenging times like those during the pandemic. We are concerned about the growing disparities between educational services provided to families who can afford to choose the mode of instruction (virtual or face-to-face) and the services provided to families who have no other options. We recommend the development of emergency preparedness and service-delivery documentation guidelines for IEP teams. Teams should agree on priority goals and services that are feasible in virtual environments. "The Covid-19 crisis has taught us that our students need each other- that connecting is possible even if it has to be done from a distance" (2020, p. 135). Teachers and those in training should receive professional development focused on increasing online engagement. Collaborations for providing necessary related services and technology support should be organized to ensure the continuity of services when emergencies such as pandemics or natural disasters occur. These considerations are a start toward ensuring the equitable and effective virtual delivery of special education services and support.

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