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## **Serving Students with Special Needs during COVID-19 Pandemic**

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Serving Students with Special Education Needs during the COVID-19 Pandemic Tara Redenius

Northwestern College

A Literature Review Presented

In Partial Fulfillment of the Requirements

For the Degree of Master's of Education

April 18, 2021

Dr. Angila Moffitt

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### **Abstract**

The advent of the COVID-19 pandemic has largely disrupted every aspect of human life. At the height of the pandemic, the state governments' suspended in-person learning in the United States to reduce coronavirus spread through human contact. The suspension was followed by policies enable the implementation of online learning for all students. Nevertheless, the changes have impacted students with special needs, caregivers, and educators in different ways. The closure of schools has disrupted student's routine, made caregivers assume the teacher's role, and required educators to shift to online learning. This literature review evaluates changes in managing students with special needs by highlighting the shift in teaching , the impact of COVID-19 on learners and caregivers, innovative ways of reaching out to the students and preparing for school reopening.

## **Serving Students with Special Education Needs during the COVID-19 Pandemic**

### **Introduction**

The advent of the COVID-19 pandemic has disrupted nearly every aspect of human life. The pandemic has had health, economic, and social impacts on people in different parts of the world. To reduce the spread of the virus, governments worldwide have closed schools, imposed lockdowns, and limited outdoor activities. The containment protocols implemented to reduce the spread of coronavirus have a monumental impact on special education (Nazerian, 2020). According to Petretto et al. (2020), over 80 percent of school-going children have been affected by suspension of in-person learning in over 188 countries. Although children are at a lower risk of developing severe illness after contracting COVID-19, they are equally affected by the pandemic (Wong et al., 2020). For instance, their learning has been disrupted and have been confined to home-based learning with little or no outdoor activities. Most states in the United States have developed programs to enable children to continue learning from home, such as home-based distance learning. Although these learning programs enable children to continue learning while still observing healthcare protocols designed to reduce the spread of the virus, their success depends on the availability of an enabling technology, the availability of parental support, and the learners' ability to adapt. The suspension of in-person learning has uniquely affected students with disabilities whose learning is anchored on routine and specialized support. Children with disabilities, who comprise close to 14 percent of the school-going population in the United States, have been affected by the learning environment's shift (Schaeffer, 2020). Instructions and support are not easily transferred to special needs students over the internet as they need special care to adapt to the new normal (Petretto et al., 2020). Although teachers are making attempts to assist children with special educational needs, it is not easy to virtually meet

individual children's needs. While serving children with special educational needs during the pandemic, it is essential to integrate all aspects of neuropsychological, emotional, and cognitive requirements of individual students in the class. The COVID-19 pandemic brings unprecedented time in delivering special needs education. Thus there is a need to develop evidence-based strategies to serve special needs children during a pandemic.

The purpose of this literature review is to determine how different aspects of special needs education has been impacted by the COVID-19 pandemic. The literature review reviewed educational studies published from March 2020-March 2021 to effectively evaluate the shifts in special needs education during a pandemic. Special needs learners are slow in adapting to the changes resulting from the COVID-19 pandemic; thus, teachers and caregivers should work together to enhance continuous learning and support. Firstly, the literature review evaluates the needs of special need learners during the pandemic. Secondly, the literature review determines how the COVID-19 pandemic has impacted special needs learners and caregivers. Finally, strategies to reach out to special needs children and further research have been discussed.

### **Literature Review**

The COVID-19 pandemic continues to affect children with special needs and their families. Many child-friendly places like schools, parks, and zoos remain closed. Social distancing continues to be a primary method to slow the spread and transmission of the disease. The measures are essential but immensely affect special needs students. Adjusting to the new standard created by the pandemic is difficult for children with disabilities. Masonbrink & Hurley (2020) advocates the importance of parents and teachers defining and closely monitoring how special needs children adapt to the changes arising from the COVID-19 pandemic. The COVID-19 pandemic has socially and educationally disadvantaged students living with disabilities. The

closure of learning facilities and cessation of movement has made it hard for special needs learners to access information, basic hygiene, and professional support. The learning and development of children living with disabilities are anchored on a routine and support system. With the suspension of in-person learning, the learners' routine has been disrupted. To ensure this group of learners ability to continue receiving a quality education, distance learning solutions have been adapted to meet the needs of children with disability.

### **Teaching Special Needs Students during COVID-19 Pandemic**

Vulnerable populations are differently affected during disasters and pandemics. In the study of Mutluer et al. (2020), the authors seek to understand how people living with autism spectrum disorder (ASD) have responded to the COVID-19 pandemic regarding understanding and adherence to mitigation protocols. The study revealed that most individuals with ASD had difficulties understanding what COVID-19 is and thus were less informed on containment protocols such as social distancing. Kong and Thompson (2020) advise parents to use simple language to ensure children understand why they are not in school.

Since the advent of the COVID-19 pandemic, most individuals living with autism stopped receiving usual learning sessions. The change in routine largely affected their sleeping and eating routines. Individuals living with ASD are hypersensitive to slight changes in their routines. Therefore, disruptions caused by the COVID-19 pandemic resulted in behavioral problems and aggression (Yarımkaya & Esentürk, 2020). A study by Tokatly Latzer et al. (2020) examined the impact of lockdown on children with autism and their caregivers. The study revealed elements of hardship were evident among children with autism and their caregivers. The authors argued that although the regulations were put in place to curb coronavirus spread, the parents feared their children would miss essential developmental services such as speech

therapy. Thus, countermeasures must be put in place during pandemics to support special needs children by reducing the pandemic's adverse effects and helping them cope.

### **Impact of COVID on Special Education Students in Rural Schools**

The COVID-19 pandemic has uniquely impacted learning in rural areas. For instance, with learning shifting from physical to virtual, many rural schools lack the infrastructure required to support distance learning. In the study of Tremmel et al. (2020), the researchers evaluate how the pandemic has affected special education programs in rural areas. The researchers argue that before the COVID-19 pandemic, many rural learning facilities were facing infrastructure and funding challenges in providing an adequate special learning environment. This challenge has been aggravated by the pandemic where learning is restricted to remote learning. This argument is supported by research showing only 27 percent of rural schools can effectively offer remote learning compared to 50 percent of schools from urban settings. Moreover, according to Mueller et al. (2021), there is a shortage of data showing the impact of the pandemic on rural populations even though rural communities are more vulnerable to the adverse impact of the COVID-19 pandemic. The study shows that most studies assessing the impact of COVID-19 are focused on urban areas, leaving out the rural communities that make up most of the American population. The researchers of the study argue unless more research is focused on the impact of COVID-19 on rural communities, recovery policies and programs risk being urban-centric. Urban-centric policies will have a negative impact on the rural areas as their needs are specific and different from those affecting urban areas. For instance, whereas there are infrastructures to enable home-based distance learning in urban areas, rural schools may need to develop infrastructural capabilities.



The digital divide has impacted the ability of special needs children from rural areas to continue learning from home. Many rural areas do not have the same internet or broadband access as urban areas in the United States. Although internet access is partly an urban concern, the situation is worse in rural areas where students have to travel hours to a McDonald's parking to get access to the internet (Anderson, 2020). In a 2021 report by the Congressional Research Services, only 82.7 percent of Americans in rural areas had access to fixed terrestrial broadband by 2019 compared to 98.8 percent in urban areas. Internet connectivity is even lower in tribal Americans at 79.1 percent (Rachfal, 2021). The report further stated that the digital divide was much evident after the start of the COVID-19 pandemic when learning and other activities shifted to online. While some students could continue learning online after the closure of schools, others did not have an option but to stop learning completely. The difference between these two groups of students led to what is commonly known as the homework gap. In addition to the lack of internet access, students from 21 percent of American household could not take part in online learning due to lack of a computer. Although the digital divide was in existence long before the advent of COVID-19, it largely affected the ability of many special needs students to continue learning after the closure of schools. This evidence is crucial in informing back to school policies to minimize educational disparities.

### **Shifts in Special Needs Education Due to COVID-19**

Teaching students with special needs during a pandemic requires a deliberate shift from the traditional educational approaches. Special needs learners have health, academic, behavioral, and physical limitations requiring specialized equipment to learn. Continued learning protects special need learners from adverse impacts of the pandemic (Mutluer et al., 2020). Therefore,

stakeholders need to work together to ensure students with disabilities continue to learn while at home.

Given that these learners require more attention, schools may be required to increase the number of teachers offering distance learning during the pandemic. According to Patretto et al. (2020), for learners with disabilities to adequately adapt to distance learning, family support is necessary. Unlike in a school setting where there are professionals facilitating learning and assessing these learners, caregivers primarily do these duties in the distance learning setup. The additional responsibilities are a challenge when parents and guardians are working. Tokatly Latzer et al. (2021) observed that schools should provide access to tools and equipment necessary for learners with special needs. As such, teachers have the challenge of developing learning programs incorporating learning tools available at home. Lack of standardized assistive learning tools used in home-learning leads to inequality in learning capabilities. The study observed that among learners with autism, imposition of lockdowns where the children were confined to small spaces resulted in psychomotor agitation. Confinement in small spaces has affected their ability to continue learning as the closure of schools continued.

Extended school closure increases the risk of educational losses and disparities (Masonbrink and Hurley, 2020). Students need to have access to the required environment and technology to benefit from home-based distance learning. According to Frederick et al. (2020), advocacy and collaboration are essential in developing a successful distance learning and support model for special needs children. The suspension of in-person learning has resulted in the implementation of online learning programs. For disabled learners, lack of uniformity is high where programs must accommodate the needs of individual learners. Nevertheless, research indicates special education learners will benefit from distance learning with effective

collaboration between education stakeholders. The distance special education and support model proposed by Frederick et al. (2020) is centered on the parents as they are the primary stakeholders in ensuring distance learning success. Apart from acquiring the necessary tools required to facilitate virtual learning, parents need to be further trained on how to use the technology to be in a position to collaborate with teachers in passing the instructions to the learners. Nevertheless, the lack of existing studies showing the effectiveness of distance learning models for special needs learners makes it hard to adopt a uniform model across all learning environments.

### **Impacts of COVID-19 Pandemic on Students with Special Needs**

Children living with disabilities are among the world's most vulnerable, stigmatized, and marginalized groups of people in the presence or absence of the pandemic (UNICEF, n.d.). The closure of schools as a result of the COVID-19 pandemic has significantly affected special needs learners. According to Prior (2020), children living with disabilities such as visual, hearing, and cognitive functioning cannot access information on COVID-19, including preventive measures. The closure of schools and implementation of social distancing protocols have largely disrupted the daily routines of children living with disabilities. Also, in-person learning suspension has denied special needs children access to essential learning tools and resources; modifications and adaptive equipment and services installed in the school to enable the special needs children to learn may not be available at home. For home-based distance learning to be successful, the learners should have access to necessary technological resources such as the internet and assistive devices. Unfortunately, continuous learning at home has been affected by the unavailability of these resources.

### **Impact on Learners Adaptation**

Disabled children are having challenges adapting to online learning platforms. For instance, assistive devices' incompatibility with online learning platforms makes it hard for students with visual and hearing disabilities to effectively learn from home. According to Asbury et al. (2020), the closure of schools due to the COVID-19 pandemic has affected the development of social skills, interactional behavior, and psychomotor skills among students with ASD. The shift to learning over the internet has disrupted their usual learning routine. Disruption of their daily routines and inability to participate in outdoor activities due to social distancing protocol has resulted in the deterioration of their development (Stenhoff et al., 2020). The authors argue that children with ASD are more restless, anxious, and grumpy. Many of them develop unpleasant development behaviors when their routines are disrupted or faced with uncertainty.

### **Infrastructural Deficiency**

Lack of physical infrastructure, assistive technology, inclusive education, and confinement at home during the Covid-19 pandemic has led to an increased level of helplessness and frustration in special needs children. Asbury et al. (2020) argued that children experiencing developmental and intellectual delays have difficulty understanding social distancing and its effect during the pandemic. The majority of special needs children have a problem understanding what covid-19 is and the measures required to prevent it, including the pandemic's hygiene-related regulations. The ineffectiveness in instruction method, lack of progress, learning, therapy, and students' inability to participate has become a challenge to the students with special needs. Reimagining home as a school has been difficult since these students know a home is for relaxation, socialization, and family time.

## **Impacts on Mental Health**

Changes arising from the COVID-19 pandemic have had a mental toll on the special needs children and caregivers. Experience of negative emotions, change in eating and sleeping patterns, and mood changes have put children at a greater risk of experiencing an accelerated mental illness and exacerbating existing mental health issues (Holmes, et al., 2020). Children's emotional states have been affected by the change of learning formats and the lack of services normally received in school. Research has shown that maintaining a structured routine helps instill discipline among special needs children and enhance their safety. The abrupt change in daily routine places these children at a higher risk of experiencing a mental relapse. According to Patel (2020), schools' closure and the shift to online learning platforms have increased stress and anxiety levels among special needs children and their parents. With more emphasis being placed on the prevention and management of COVID-19, mental health clinics and support systems have been closed or inaccessible.

Parents and guardians face the challenge of taking care of their special needs children by assisting them in taking part in online classes. The general perception is that parents should be able to take up teaching roles. This expectation increases their stress and anxiety levels, which trickle down to the children. A study conducted by Dhiman et al. (2020) to evaluate the impact of the COVID-19 pandemic on special needs children and caregivers' mental health revealed a high prevalence of depression. The researchers argued that the sudden closure of schools and imposition of the lockdown made it hard for the special needs children to access assistive services such as therapies, passing the responsibility to caregivers. Parents and caregivers need to shift from their daily routine to offering specialized assistance is challenging and may lead to caregiver strain.

## **Impacts on Home Support System**

Some parents have no experience using most of the technologies and devices used to implement home-based distance learning. Also, tough economic conditions resulting from the COVID-19 pandemic have made it hard for most families to access devices and the internet required to facilitate online learning (Tokatly et al., 2020). Parental overload due to work makes parents have insufficient time to monitor their children with disabilities, who then miss the online learning process (Dhiman et al., 2020). Educators need to understand the sudden leap to home-based learning is a challenge to many caregivers who have already been stressed. Therefore, as they endeavor to reach out to the learners, they need to help the parents learn how to use the technologies needed to facilitate online learning. Parents can only offer the necessary support to the learners if they are familiar with the entire infrastructure. Therefore, online learning programs have had to create a working collaboration with caregivers to mount a meaningful learning experience.

Change in learning processes and lack of teaching skills from the home support system has affected learners' ability to follow through with all lessons leading to incomplete tasks. The incomplete tasks may accumulate, making the child to lose focus. Due to the Covid-19 pandemic's abrupt changes, many children remained disconnected from their teachers whereas some have developed a good connection with their teachers. The different levels of student-teacher connection has led to disparities in access and retention of knowledge among the children. Also, the disconnection between learners and the learning process has led to confusion in some children, with most of them unable to express themselves to the caregivers and other family members (Tokatly et al., 2020). The caregivers may fail to understand the strategy used when offering special children's duties and responsibilities, thus overloading them with tasks.

Shifting to online learning has become a new way of learning, bringing confusion and misunderstandings during lessons. COVID-19 pandemic has decreased learning time for students, negatively affecting students' performance. New skills learned before the pandemic have been disrupted due to inadequate monitoring during the virtual learning era. The more frequently students miss their learning sessions, the worse their performance and skill development will be in the long run.

Maintaining and stimulating school-home partnerships during the Covid-19 pandemic is essential for children's achievement (Tremmel et al., 2020). Teachers' attitudes may influence parents' involvement in their children's education; thus, school leaders, teachers, and psychologists should take family-focused approaches to enhance smooth remote learning at home. The educational institution's main focus should be to hold meetings with parents, guiding them in supporting their children's online education. Moreover, schools' implementation of educational programs can help parents cope with stress and connect families to community services. Encouraging a sense of responsibility in parents by communicating their roles and responsibilities during the pandemic (an increased level of parent's involvement in their children's learning at home) may positively motivate the learners (Petretto et al., 2020).

### **Impacts on Learners Capabilities**

Disengagement with learning has led students to lose interest and focus, which might become a challenge to school resumption post-pandemic. The teaching of special needs children has been affected by the lack of requirements for effective remote learning. With in-person slowly getting replaced with virtual learning, resumption to in-person after the pandemic will be a challenge to students, teachers, and parents. Therefore, learners need to be psychologically prepared; there is a possibility of going back to school soon (Joline E, et al., 2020). A study by

Stifel et al. (2020) suggests online learning presents a challenge in how school psychologists conduct assessments of students' mental status. The study proposes an assessment protocol that will enable psychologists to carry out their duty without placing the students' lives at risk. The personal relationships between students, teachers, and after-school activities support children's emotional, social, mental, and skill development.

Disabled children who suffer physical and mental health problems had an opportunity to receive medical care from school-based clinics before the pandemic. According to Neece et al. (2020), parents are concerned with the pandemic's long-term implications on special needs children as most parents have a challenge in caring for them while at home. The study argues that for special needs children who require specialized care, their health is likely to deteriorate as these services are hard to access during lockdowns. The study also indicated that the special needs children had uneven access to online learning and assessment. Testing and monitoring special children during the pandemic has become difficult, affecting students' performance and learning. However, the study revealed all is not lost due to the pandemic, as 49.2 percent of the interviewed parents indicated they were able to spend more time with their children.

The closure of schools resulting from the COVID-19 pandemic has resulted in special needs children missing out on basic needs available to them through schools (Tokatly Latzer et al., 2020). Schools can provide special need students with a complete support system to enables them to develop wholesomely. Children with autism can develop a healthy eating pattern while in school, a routine largely disrupted with the sudden closure of schools. Many parents in the study reported their children's anxiety, and stress as a result of the disruption resulted in refusal, selectivity of food, and in some cases, binge eating. In areas where families were not allowed to travel more than 330 feet from their homes, it was hard to acquire various foods. Refusal,



selective eating, and lack of food variety led to unhealthy eating among special needs children. Additionally, some public schools offer students with free or reduced-price meals when in session, a benefit not possible with schools closed. Children from food-insecure homes miss out on these benefits and thus live with little food or an unbalanced diet. Besides, some parents lost their jobs and did not qualify for employment insurance and thus cannot offer balanced diets to the children (Fry-Bowers, 2020).

Progressive monitoring of special education students can continue throughout the COVID-19 closures through online platforms. A partnership can provide modified goals to students during distance teaching (Peterson et al., 2020). School administration can monitor students with special needs in readiness for potential challenges in returning to school. The office of special education programs can offer information to caregivers and schools regarding COVID-19 closures related to special education (Peterson et al., 2020). Volunteers may facilitate guidance for home learning and provide monitoring and support for students during school. Teachers can adjust the tracking of resources and guidance documents to provide the best education for students with disabilities during unprecedented times. Maintaining regular physical activities and exercise safely in the home environment can be an essential strategy for a healthy life during the Covid-19 crises, especially for children with a particular need.

Participation in physical activities has a positive effect on the health and learning of children with disabilities. Physical activities can improve social behavior, communication skills of children with special needs, and quality of life, thus reducing aggressive behavior, stress levels, and behavioral problems during the pandemic (Yarımkaya & Esentürk, 2020). Research shows that lockdown restrictions put in place to stop the spread of the virus have reduced physical activity levels by over 61 percent (Theis et al., 2021). Reduction in physical activities

among children with physical and intellectual disabilities lead to social and learning regression and poor behavior. Therefore, for disabled children with nowhere to take part in physical activities, teachers should help caregivers develop programs to ensure they remain physically active while staying safe. Such programs can involve massage and indoor workout activities.

A home routine for children with special needs can be comforting as children become familiar with new practices; a daily visual schedule can help (Masonbrink & Hurley, 2020). By previewing the calendar every day, children can anticipate events before they happen and stay updated. Without a typical school and weekend schedule, days and weeks merge, disorienting the activities. Visual timers can allow children to view how much time is remaining for a particular action before transitioning to the next exercise.

### **Reaching Out to Special Need Students during the Pandemic**

Closure of schools due to COVID-19 has presented educators with an unprecedented task of ensuring special needs students continue learning from home. Frederick et al. (2020) propose an education support model that can enable educators to support special education students from different geographical locations. The proposed model seeks to reduce regression in learners' skills during the pandemic by using data to inform individual students' best interventions. The foundation of the model is a continuous collaboration between parents and educators. This model's success is based on the ability to personalize support to align with the individual needs of a student. Thus, the model is applicable in providing support to special needs learners during the COVID-19 pandemic when in-person support is impossible. However, just like other stakeholders, educators are also experiencing challenges coping with the new teaching tools and requirements (Klapproth et al., 2020). Nevertheless, they are willing to adopt technology to reach out to the learners effectively.

## **Using Technology To Reach out to Learners**

With the closure of special schools and the growing need for continued learning, educators have turned to technology to ensure they keep in touch with special needs educations. Besides using technology for instructional purposes, educators are also using technology to provide therapeutic sessions to learners in collaboration with parents and guardians. According to Goldschmidt (2020), technology has played a crucial role in maintaining children's wellbeing amid lockdown and social distancing regulations installed to reduce the spread of COVID-19. For children, playgrounds and parks play a crucial role in the physical and social development of children. However, with these outdoor spaces closed, caretakers use technology to keep children engaged with games, crafts, and watching television. As such, caregivers and educators have turned to technology to keep learners learning and connected. A study conducted by Reich et al. (2020) seeking to identify policy guidance regarding remote learning shows over 20 percent of American states has provided comprehensive guidelines to enable students to continue to learn remotely after the schools have been closed. Apart from recommending comprehensive remote learning, most state guidelines have emphasized equity and access, attention for learners with varied needs, and statewide assessments (Jameson et al., 2020). These guidelines have played a crucial role in providing a framework for educators who have adopted remote learning programs. According to Agoratus (2020), changes in special school learning modes should comply with the Individuals with Disabilities Education Act (IDEA).

## **Videoconferencing Technologies**

Educators have adopted different videoconferencing technologies to continuously address special education learners' diverse needs (Frederick et al., 2020). Online whiteboards and screen recording tools have enabled educators to provide students with visual examples related to the

topic at hand. With the use of different technologies, educators are able to provide on-demand tutorials to the learners and caregivers remotely. Instructors have also leveraged the power of Zoom and Google Meet to connect with students through videos. Google Classroom has been used by special needs teachers to provide updated information and feedback on assignments to special needs students and timely feedback provided through Google Slides to enhance draft assignment and students' projects.

Educations can combine online applications to support special education learning. Creating a Google Doc checklist consisting of daily assignments by instructors and posting on Google Classroom for students to adjust and use during home instruction has been useful during the pandemic. Teachers have provided opportunities for early finishers and supplemental practice to special needs students. Buchanan & Wojciechowska (2020) state teachers should provide clear and concise instructions to parents on navigating through online and website programs. Applications such as Screencastify have provided an auditory platform for struggling students, guiding reading lessons. Some teachers use the Educreations application to turn an iPad into a recordable whiteboard to create dynamic lesson videos accessible as needed by students and parents. Google Meet has been useful by instructors to support and collaborate with students, parents, and special services teams.

Educators can use online applications to regularly communicate with parents. Regular communication help educators to improve flexibility during remote learning by prioritizing on the needs of individual learners. For instance, the use of Google Meet by the educators to communicate with students ensures the learners get the attention they deserve. Additionally, students have fun moments showing family pets to each other during live video session, making learning exciting and motivating. Teachers have also used the advanced Chrome settings like

highlighting text, read-aloud, text-to-speech features, and even the Learning Ally application that provides access to the audio version of books currently read by students. Google Classroom has helped in assigning and grading comprehension questions to students' instructors. In case the quality is not as expected, the teacher reassigns the questions to students allowing them to learn from known to unknown. Educators are also using Google Slides to develop visually attractive lessons for learners with autism. Additionally, some teachers also offer direct modeling and extra practice to record lessons for additional reading support. The FaceTime application has been useful to teachers to maintain student connections and when home technology issues arise.

Moreover, teachers have used a choice board to give students with special needs flexibility to learn and practice skills. According to Frederick et al. (2020), other teachers have teamed up to meet the diverse needs of learners in the digital world during the pandemic by being on the frontline at home, creating safe learning environments for all students. Online learning has features such as Zoom, providing information to common online classroom platforms. Teachers initiated the teaching of new media for students who are not familiar with the media. Introducing the platform layout is the most crucial step in ensuring students who have never used a certain assistive technology can effectively use it.

Before the advent of the COVID-19 pandemic, online learning was used to supplement conventional learning methods. With in-person learning impossible in many places, e-learning has become the only option to ensure the continuation of learning. Although technology integration in learning has been emphasized in the past for its ability to increase learners' involvement and enhance knowledge retention, the use of technology still lags in special education. According to Buchnat and Wojciechowska (2020), distance learning is a challenge in learners with intellectual disabilities and those with an autism spectrum disorder. The two

researchers argue that educators need to adequately prepare when delivering distance learning to this group of students to ensure they are not further marginalized.

### **Emotional Connection**

Schools also need to engage more special education teachers and specialists to enhance smooth learning during the pandemic (Patel, 2020). Additionally, educators need to communicate with children's caregivers regularly. Special education teachers may contact each student's family to assess their needs by email, phone, or Skype. Feedback from parents will enable the teachers to re-strategize their teaching plan and focus more on children with difficult learning (Mutluer et al., 2020). Communicating frequently can ensure timely and purposeful information is shared between educators and children caregivers. Additionally, a close partnership between educators and children enables students to receive individualized learning materials based on their daily schedules and routines (Mutluer et al., 2020). Special education teachers may continue to address goals online by holding one-on-one and small-group sessions using Zoom to ensure students continue to learn while at home. Students without access to a phone could use caregivers' phones to watch instructional videos. Counselors can also use online sessions for behavior counseling to promote mental health for students who need behavior intervention while at home (Patel, 2020).

During the pandemic, educators have tried to get attached to students emotionally and socially, supporting them with the challenges faced during the closure (Dooley et al., 2020). The socio-emotional outreach from a teacher shows caring and protection of the special needs student. The safety and support students receive from teachers during the pandemic make them experience more positive emotions, boosting cognitive learning resources. Students with special needs need more connection for skill development and learning. The support provided to learners

with special needs, extra instruction, support, and encouragement during tasks helps in the remote learning process. Teachers can offer additional support by extending lessons to assist with assignments and make clarifications to both learners and caregivers.

Teachers have provided online spaces to help stressed learners to express themselves freely. These online spaces use calming strategies for children who need a movement break, brain break, and mindfulness activities when feeling overwhelmed. Teachers have collaborated with teams such as the special education team, counseling support staff, and school pathologists to develop innovative ways to ensure students feel supported, connected, and engaged during the COVID-19 pandemic. Teachers must also closely associate with parents to create an emotional connection with learners since they have direct access to a special needs student while at home. The parent is the primary source for learning during the pandemic, and real growth can happen for students when the teacher engages the parent in every step. Special education teachers should contact the families of each student they serve, assessing the needs of families. For communication facilitation, ClassDojo, a free communication platform, is used by educators to connect with families. Facilitating easy communication with parents enables teachers to send updates and reminders with essential information regarding the students' progress.

### **Preparing Special Needs Learners for Return to School**

There is no definite end of the pandemic and resumption date for face-to-face learning. Amidst the uncertainties, teachers and caregivers need to keep the learners informed on any changes in the learning routine. Given that some learners have got used to home-based learning, the resumption of in-person learning will also have a negative impact on their routine and learning. Consequently, educators and other stakeholders need to prepare the learners for an inclusive return to school adequately. A 2020 report by UNICEF proposes a seven approach

model to ensure schools achieve an inclusive return to school (UNICEF, 2020). The whole systems approach require learning institutions to develop clear plans to accept learners back to school, allocate budget for special needs learners, conduct outreach to families, and enhance accessibility before reopening schools. After reopening schools, ensure prevention protocols are in place, implement policies that promote quality education and invest more in all-inclusive remote learning programs in preparation for future closures. On curriculum and assessment, the model proposes providing access to learning materials and communicate any curricular and assessment changes expected to be in place once schools reopen. The model proposes additional training for special need teachers and the provision of mental support before schools are reopened to the support system. After the schools have been reopened, clear protection protocols for teachers and children should be provided. Further, schools should develop a friendly learning environment to effectively support an effective transition from home-based learning to in-school learning. Finally, partnership and monitoring will ensure an all-inclusive return to school for children with disabilities is achieved.

Return to school plan for children with disabilities should prioritize the safety of learners. According to Joline et al. (2020), return to school programs should focus on providing a safe and less restrictive learning environment for staff and students. This study observes learning institutions need to adequately prepare for reopening the schools to avoid challenges in transitioning to online learning. Given that children with disabilities may have a challenge understanding and adhering to laid down healthcare protocols, schools need to put measures in place to ensure these learners are closely monitored and assisted to guarantee their safety. Also, while enforcing healthcare protocols to curb the spread of the virus, schools need to avoid the isolation of learners. Learners with disabilities are largely affected by social isolation of any



form. For learners with emotional and cognitive disabilities, isolating them from activities such as singing and play will deny them their only chance of having a meaningful social interaction with others. Therefore, as schools strive to observe safety protocols, it is important to consider the needs of individual students.

Schools in collaboration with other stakeholders have the problem of identifying the most appropriate opening strategy for students with disabilities. As observed by Joline et al. (2020), students with disabilities benefit more from in-person learning as their learning require specialized interaction with special need teachers and other professions. Nevertheless, they are at a higher risk of contracting COVID-19 as they cannot understand and adhere to prevention protocols without supervision. Consequently, Agoratus (2020) recommends a phased resumption to in-person learning should consider the risk levels of teachers and learners. Additionally, according to Carvalho et al. (2020), schools should include community participation to determine the best back-to-school program.

The back-to-school approach adopted should be child-centered. Education disruption is likely to continue after the reopening of schools with a possibility of a future closure. Therefore, the learners should be involved at every stage of school reopening. As they are resistant to any change in their life, children with disabilities could resist going back to school. Although resistance is fine, educators and parents can overcome it by providing them with reopening plans before going back to schools. New in-person regulations should consider learners living with disabilities. For instance, according to Moro et al. (2020), when setting up hand hygiene points, schools should consider offering support to special needs learners. Additionally, educators should continuously educate the learners why they cannot continue learning as they used to, why they have to wear masks, wash hands regularly, and observe social distancing. Additionally,

learners need to be educated on what would happen if they fail to adhere to the new regulations. Building a routine around these changes will help the learners to adapt to the new changes quickly. Therefore, by involving the learners in every stage of the transition, the transition will be fast and effective.

### **Conclusion**

Existing research shows that serving children with disabilities during and post COVID-19 require collaboration between stakeholders. Research has shown COVID-19 has adversely affected the learning of students with special needs, and it is the role of parents, schools, and educators to join hands and help the students adapt to the changes. The pandemic was unplanned; thus, people cannot blame one another for its impacts. With the suspension of in-person learning, children have been forced to stay away from schools and adapt to online learning methods. For children with disabilities, a slight change in their routine has a huge impact on their development and ability to learn. With most of the children unable to understand why they cannot go to school, caregivers and teachers carefully explain why they have to continue learning from home until such a time that outdoor venturing can be possible. While the advent of the pandemic and closure of schools caught people unaware, the existing study has shown how special needs learners have been affected by the pandemic as well as how learners have ensured teaching and contact with students continue. The use of technology and collaboration between stakeholders has enabled learners to continue learning from home. Nevertheless, there are no evidence-based strategies to help educators and caregivers optimally serve special needs students during the COVID-19 pandemic. Integrating this strategy with existing literature on teaching and reaching out to special needs children will enable stakeholders to manage social and educational changes

during and post-covid-19 periods. Therefore, special needs teachers and caregivers will find the proposed strategies to serve special needs children useful in home-based and in-person learning.

## References

- Agoratus, L. (2020). Extended school year and compensatory services: special education during the covid-19 pandemic. *The Exceptional Parent*, 50(6), 22.
- Buchnat, M., & Wojciechowska, A. (2020). Online education of students with mild intellectual disability and autism spectrum disorder during the COVID-19 pandemic. *Interdyscyplinarne Konteksty Pedagogiki Specjalnej*, (29), 149-171.  
doi:10.14746/ikps.2020.29.07
- Dhiman, S., Sahu, P. K., Reed, W. R., Ganesh, G. S., Goyal, R. K., & Jain, S. (n.d.). Impact of COVID-19 outbreak on mental health and perceived strain among caregivers tending children with special needs. *Research in Developmental Disabilities*, 107, 103790.  
doi:https://doi.org/10.1016/j.ridd.2020.103790
- Dooley, D. G., Simpson, J. N., & Beers, N. S. (2020). Returning to School in the Era of COVID-19. *JAMA pediatrics*, 174(11), 1028-1029. doi:10.1001/jamapediatrics.2020.3874
- Frederick, J. K., Raabe, G. R., Rogers, V. R., & Pizzica, J. (2020). Advocacy, Collaboration, and Intervention: A Model of Distance Special Education Support Services Amid COVID-19. *Behavior analysis in practice*, 1-9. doi:https://doi.org/10.1007/s40617-020-00476-1
- Fry-Bowers, E. K. (2020). Children are at risk from COVID-19. *Journal of pediatric nursing*, 53, A10-A12. doi:10.1016/j.pedn.2020.04.026
- Goldschmidt, K. (2020). The COVID-19 pandemic: Technology use to support the wellbeing of children. *Journal of Pediatric Nursing*, 88–90. doi:10.1016/j.pedn.2020.04.013
- Holmes, E. A., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., & Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for

- mental health science. *The Lancet Psychiatry*, 7(6), 547-560.  
doi:[https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1)
- Iivari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital transformation of everyday life— How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? *International Journal of Information Management*, 55, 102183. doi:<https://doi.org/10.1016/j.ijinfomgt.2020.102183>
- Jameson, J. M., Stegenga, S. M., Ryan, J., & Green, A. (2020). Free Appropriate Public Education in the Time of COVID-19. *Rural Special Education Quarterly*, 39(4), 181-192. doi:<https://doi.org/10.1177/8756870520959659>
- Joline E, B., Lainie K, H., Susan D, A., Amy J, H., Robert, R., & Maurice G, S. (2020). School reopening during COVID-19 pandemic: Considering students with disabilities. *Journal of Pediatric Rehabilitation Medicine*, 1-7. doi:10.3233/PRM-200789
- Klapproth, F., Federkeil, L., Heinschke, F., & Jungmann, T. (2020). Teachers' experiences of stress and their coping strategies during COVID-19 induced distance teaching. *Journal of Pedagogical Research*, 4(4), 444-452. doi:<https://doi.org/10.33902/JPR.2020062805>
- Kong, M., & Thompson, L. A. (2020). Considerations for Young Children and Those With Special Needs as COVID-19 Continues. *JAMA pediatrics*, 174(10), 1012-1012. doi:10.1001/jamapediatrics.2020.2478
- Masonbrink, A. R., & Hurley, E. (2020). Advocating for children during the COVID-19 school closures. *Pediatrics*, 146(3), e20201440. doi:<https://doi.org/10.1542/peds.2020-1440>
- Mueller, J. T., McConnell, K., Burow, P. B., Pofahl, K., Merdjanoff, A. A., & Farrell, J. (2021). Impacts of the COVID-19 pandemic on rural America. *Proceedings of the National*

- Academy of Sciences*, 118(1), 2019378118. Retrieved from  
<https://doi.org/10.1073/pnas.2019378118>
- Mutluer, T., Doenyas, C., & Genc, H. A. (2020). Behavioral Implications of the Covid-19 Process for Autism Spectrum Disorder, and Individuals' Comprehension of and Reactions to the Pandemic Conditions. *Frontiers in psychiatry*, 11, 561882. Retrieved from  
<https://doi.org/10.3389/fpsy.2020.561882>
- Nazerian, T. (2020). Impact of the Covid-19 Pandemic on Early Childhood Care and Education. *Early Child Educ J.*, 1-4. doi:10.1007/s10643-020-01082-0
- Neece, C., McIntyre, L. L., & Fenning, R. (2020). Examining the impact of COVID-19 in ethnically diverse families with young children with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 64(10), 739-749.  
doi:<https://doi.org/10.1111/jir.12769>
- Patel, K. (2020). Mental health implications of COVID-19 on children with disabilities. *Asian Journal of Psychiatry*, 102273. doi:10.1016/j.ajp.2020.102273
- Petretto, D. R., Masala, I., & Masala, C. (2020). Special educational needs, distance learning, inclusion and COVID-19.
- Prior, S. P. (2020, May). *COVID-19 Cannot Quarantine Special Education Rights*. Retrieved from ep-magazine.
- Reich, J., Buttimer, C. J., Fang, A., Hillaire, G., Hirsch, K., Larke, L. R., & Slama, R. (n.d.). Remote learning guidance from state education agencies during the covid-19 pandemic: A first look. doi:<https://doi.org/10.35542/osf.io/437e2>
- Schaeffer, K. (2020, April 23). *As schools shift to online learning amid pandemic, here's what we know about disabled students in the U.S.* Retrieved from Pew Research Center.

- Stenhoff, D. M., Pennington, R. C., & Tapp, M. C. (2020). Distance education support for students with autism spectrum disorder and complex needs during covid-19 and school closures. *Rural Special Education Quarterly*, *39*(4), 211-219.  
doi:<https://doi.org/10.1177/8756870520959658>
- Stifel, S. W., Feinberg, D. K., Zhang, Y., Chan, M. K., & Wagle, R. (2020). Assessment During the COVID-19 Pandemic: Ethical, Legal, and Safety Considerations Moving Forward. *School Psychology Review*, *49*(4), 438-452.  
doi:<https://doi.org/10.1080/2372966X.2020.1844549>
- Tokatly Latzer, I., Leitner, Y., & Karnieli-Miller, O. (2021). Core experiences of parents of children with autism during the COVID-19 pandemic lockdown. *Autism*, *1362361320984317*. Retrieved from <https://doi.org/10.1177/1362361320984317>
- Tremmel, P., Myers, R., Brunow, D. A., & Hott, B. L. (2020). Educating Students With Disabilities During the COVID-19 Pandemic: Lessons Learned From Commerce Independent School District. *Rural Special Education Quarterly*, *39*(4), 201-210.  
Retrieved from <https://doi.org/10.1177/8756870520958114>
- UNICEF. (n.d.). *Children with disabilities*. Retrieved from UNICEF:  
<https://www.unicef.org/eca/children-disabilities>
- Wong, C. A., Ming, D., Maslow, G., & Gifford, E. J. (2020). Mitigating the impacts of the COVID-19 pandemic response on at-risk children. *Pediatrics*, *146*(1), e20200973.
- Yarımkaya, E., & Esentürk, O. K. (2020). Promoting physical activity for children with autism spectrum disorders during Coronavirus outbreak: benefits, strategies, and examples. *International Journal of Developmental Disabilities*, 1-6.  
doi:<https://doi.org/10.1080/20473869.2020.1756115>

