

EXPLORING DISTANCE LEARNING TEACHING STRATEGIES TO INCREASE STUDENT PARTICIPATION OF CHILDREN WITH AUTISM SPECTRUM DISORDER

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Paper Received: 20.11.2023 / **Paper Accepted:** 17.12.2023 / **Paper Published:** 19.12.2023

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Abstract

The coronavirus disease pandemic led national governments to enforce social distancing measures to curb the virus's spread, temporarily pausing face-to-face learning and shifting emphasis towards online distance learning. This study investigates teaching strategies employed by special education teachers for children with Autism Spectrum Disorder (ASD), specifically focusing on student engagement in online classes. Qualitative data was collected through interviews with active special education teachers during the COVID-19 pandemic. Surveys mirroring the interview questions were conducted among parents/guardians of children with ASD to ensure data triangulation and comprehensive analysis of distance learning strategies for children with ASD. The data revealed lower student participation in the online setup and consistent challenges special education teachers face, particularly in monitoring physicality, socialization, and integrity of student output. The current setup necessitates the active involvement of parents/guardians, despite many lacking the necessary skills for effective instruction. However, successful approaches include incorporating immersive activities tailored to the child's interests, gradually integration more challenging tasks, and the utilization of visual aids in online classes. These strategies have yielded positive results in attending to the specific needs of children with ASD, based on their unique characteristics. Doing so aids in fostering enhanced student participation and adapting to the individual needs of children with ASD. In summary, this study sheds light on effective teaching strategies during the pandemic, emphasizing the crucial role of parental involvement and tailored approaches to support children with ASD in distance learning.

Keywords: Autism Spectrum Disorder, Distance Learning Teaching Strategies.

Introduction

The Coronavirus disease (COVID-19) pandemic is conventionally traced back to January 2019, when the virus manifested as a highly contagious, severe upper respiratory tract syndrome and occurred over a large geographical area. The COVID-19 pandemic is one of the most notable and thoroughly documented pandemics.

Hiscott et al. (2020) concluded that the pandemic had affected multiple sectors on a worldwide scale to varying degrees, dependent on government response. Moreover, due to a lack of a unified strategy between countries regarding pandemic response and little resources initially given to pandemic prevention measures, countries relied on last-moment strategies, efforts, and choices to suppress the already spreading pandemic. This led to a global impact on healthcare, economics, and lifestyle, ushering in "The New Normal" (Kaye et al., 2021). In response, the world government enforced social distancing to prevent the further spread of the COVID-19 virus.

One of the issues given the most attention during the growing height of the worldwide COVID-19 pandemic was the topic of education (Donnelly et al., 2021). Measures were taken to improve the safety of students and school personnel as a transition towards distance education methods such as online learning, the implementation of modules, and the restriction of learning methods that call for proximity among students and school personnel. However, largely overlooked sector within education is special education, specifically regarding children with autism spectrum disorder (Sparks, 2022). Special education aims to provide students who differ socially, mentally, or physically from the average with an education modified to address their specific needs (Britannica, 2013). With the enforcement requiring children to adapt to the new methods of distance learning during the COVID-19 pandemic, children with special needs have experienced difficulty adapting to the changes made (Perez, 2022). According to Labrague (2018), this is especially apparent in the Philippines, wherein the

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issue is only exacerbated as, under the circumstances before the COVID-19 pandemic, the Philippine special education system was already subject to criticism for being known not to be adequately responsive to issues at hand. There have been studies regarding the topic, especially in countries such as Turkey with established systems for special education, such as that of Yazcayir & Gurgur (2021) which concluded that the personalized attention necessary to provide children with ASD with quality education was lacking as the methods employed did not cater to the children's specialized needs. Additionally, Tokatly Latzer et al. (2021) detailed the difficulties of children with special needs and how the children reacted to changes in routine and lack of special education services during the pandemic-induced lockdown. Additionally, difficulties children with special needs face in response to changes in routine and a lack of special education services were also detailed.

Conceptual Framework

A relevant theory, Universal Design for Learning (UDL), can assist schools and designing learning spaces that are adaptable and free of obstacles. It is a framework that promotes fair educational access and participation (Ministry of Education, 2022). This framework is highly suitable for our research because our main objective is to investigate and evaluate distance learning methods employed by special education teachers for children with Autism Spectrum Disorder (ASD). The focus of our analysis is based on student participation as a key variable. By considering student participation, we aimed to identify and discuss various features, methods, and practices that can enhance the overall quality of distance learning for children with ASD.

Additionally, according to our participants, teachers and parents, some students have high-functioning autism, while others have low-functioning autism. We recognized a need in the ASD community for a broad viewpoint on varied issues. As a result, UDL caters to a wide range of demands in online education, personalizing methods to each kid with ASD. The research proposes measures to increase student participation and involvement by embracing diversity.

The framework can lead the investigation regarding how to construct inclusive and successful educational opportunities in online classrooms that promote participation among children with ASD. The overall goal is to improve these students' participation and educational results in a distant learning circumstances.

Statement of the Problem

Considering the aforementioned reported issues regarding mainstream distance learning as a whole and information regarding special distance

education, it can be hypothesized that special distance education shares similar issues with common faults listed under mainstream distance learning with added difficulties. These added difficulties range from the lack of special attention necessary to provide children on the Autism spectrum with effective education, difficulties in the production of lesson plans, a lack of support and the report that the structure of online learning interferes with common needs of children with autism. Keeping these factors in mind, student participation in the online setup can be increased through the implementation of tailored teaching strategies

Scope and Delimitation

The scope and delimitation of this study specifically target special education teachers in the Philippines and parents of children diagnosed with Autism Spectrum Disorder (ASD). The primary objective is to investigate distance learning methods employed for students with ASD and explore existing strategies used in educational programs. The study aims to provide valuable insights into effective practices that can be implemented in remote education settings where such practices are not typically carried out. To achieve these research goals, a combined approach of survey using Google Form and online interviews using platforms like Zoom and Google Meet was employed. The survey gathered data from parents of children with ASD, focusing on the strategies they use to support their children's education in the special distance education setup. The online interviews provided essential information from special education teachers, examining the methodologies they adopt to ensure effective student engagement and participation among children with ASDs.

The approach of the study enabled the collection of comprehensive information pertaining to how parents and teachers navigate the educational challenges faced by children with autism during the COVID-19 pandemic, encompassing both open-ended and structured response formats.

In research conducted by Latzer, Leitner, and Karnieli-Miller (2021), the study was limited due to the small population of students with Autism Spectrum Disorder (ASD) in Israel. As a result, the sample will be diverse regarding income group and family condition, explicitly focusing on students with ASDs.

METHODOLOGY

Research Design

The study employed a qualitative research methodology, characterized by the collection and analysis of non-numerical data (Hoover, 2021). Using qualitative research methodology in "Exploring Distance Learning Teaching Strategies to Increase Student Participation of Children with

Autism Spectrum Disorder”, the teachers' perspectives and teaching strategies for students with autism are understood through their responses to the questions administered in the interview. Contrarily, the qualitative approach entails classifying the participants—parents of autistic children—in accordance with survey data that quantifies the effective strategies of distance learning for the parents of children with autism.

Participants/Respondents of the Study

The researchers obtained seven respondents of special education teachers with prior experience in distance learning education. These teachers were asked a set of identical questions to be answered in an open-ended manner to allow for the collection of professional insight. The teachers were contacted through referrals or through convenience sampling by attending educational gatherings focused on education for children with ASD.

Additionally, the researchers received eight responses from parents of children with ASD. These responses came from attendance at educational gatherings focused on education for children with ASD and calls for responses on online groups focused on education for children with ASD on the social media platform Facebook. These responses provided valuable insight into the existing challenges of online education for this population. All the respondents in the study are from the Philippines, specifically the parents and teachers of children on the Autism spectrum.

Instrument/s of the Study

Various online platforms will serve as the platform for collecting data. Google Meet and Zoom are the primary data collection instrument for the interviews, while Google Forms was used for the surveys. The survey and interview consisted of open-ended questions.

The parents or guardians answered the survey questions, since the survey mainly revolve around questions about the child's behavior, habits, and routine. On the other hand, interviews with the special education teachers was conducted as the interview questions aim to collect data such as experiences had during online distance learning compared to the traditional classroom, the different teaching methods employed during ODL, and the insights/ recommendations the teachers have for other educators on which methods were most effective for the interviewee's situation.

Data Collection and Analysis

As indicated for data collection, a comprehensive survey was conducted among parents or guardians of children with Autism Spectrum Disorder (ASD), covering strategies employed to support their educational journey during the COVID-19

pandemic. Additionally, online interviews with special education teachers were conducted to explore their strategies in addressing the specific needs of children with ASD and fostering inclusive education during remote learning.

For Data Analysis, Qualitative content analysis was performed to study the collected data, aiming to identify themes and patterns within the responses from educators and parents of children with Autism Spectrum Disorder (ASD). The analysis will compare interview and survey answers, enabling researchers to draw insights on factors improving student participation for children with ASD. Qualitative content analysis is a suitable research technique for examining qualitative data, providing flexibility and efficiency in analyzing different data sources (Content Analysis, 2023). The researchers chose to use qualitative content analysis as their research tool as the data they collected were predominantly qualitative.

Ethical Considerations

Ethical considerations were being taken into account throughout the study to ensure the participants' rights and confidentiality. Potential risks and discomfort were handled to guarantee that the interview or survey did not cause harm to people (mentally). To preserve the privacy of the participants, confidentiality procedures were applied, and only necessary information was gathered for the study. Participation in the study was fully optional, with individuals free to leave at any time without consequence. The study could offer useful insights into remote learning methods for children on the autistic spectrum in the Philippines, helping to enhance special education practices in the nation. Overall, the study was planned with ethical standards in mind, protecting the individuals' and society's interests.

Result and Discussion

According to the educators, online learning is perceived as less advantageous and beneficial for their students, particularly high-functioning autistic students, in comparison to in-person or face-to-face learning. They have observed that their students exhibit slower progress during online classes. Moreover, one educator highlighted that their student regressed in the areas where they had previously made advancements during in-person classes prior to the pandemic-induced transition to online learning. The students' difficulties in socialization and behavior stand out as key areas where they experience limited progress in the online learning environment. This can be attributed to the absence of direct engagement, reduced socialization opportunities, challenges related to task completion integrity, and the presence of numerous distractions.

The research findings, on the other hand, reveal that most, if not all, educators rely on visual aids and digital resources, such as online games and annotation tools, to increase student engagement during online sessions. Educators have observed that the use of visual aids increases student involvement in class. This is especially important for high-functioning autistic kids, who may benefit from visual signals and interactive materials in their learning process. Furthermore, among those interviewed educators, the use of a situational approach in teaching appeared as a common practice. According to their findings, students' comprehension and grasp of concepts or ideas improve when they are engaged in real-life circumstances rather than just getting explanations or descriptions of these scenarios. This method to experiential learning can be especially effective for children with ASD since it provides them with tangible experiences and context for grasping abstract concepts. However, regarding the perspectives of the eight parents, visible distractions within the home environment were identified as another obstacle that parents or guardians had to contend with while supporting their children's education. These distractions could include noise from other family members or household activities, which might affect the child's ability to focus and actively participate in online classes.

Additionally, a large proportion of parents or guardians reported having problems with their household's internet connection. This issue hampered many families' online learning experiences, resulting in connectivity troubles, disruptions during sessions, and limited access to online resources. The child's ability to fully participate in virtual lessons was hampered by a lack of a consistent internet connection, which caused irritation and possible learning gaps. Students with ASD may find unexpected interruptions disturbing in some situations, making it difficult for them to restore concentration and engage successfully in the learning process. Furthermore, limiting access to internet resources may limit the child's ability to obtain extra materials and practice tools, both of which are critical for academic advancement.

To address these challenges, the educators and parents collaborated to find solutions. In which, during the interview the educators highlighted the need of coordination/communication between parents, guardians, and teachers. They emphasized that without effective parent/guardian and teacher contact, the online learning process would be nearly impossible since they are required in monitoring and maintain both their academic and behavioral courses. Collaboration between home and school is essential for assisting children with ASD during remote learning because parents play an important role in providing a conducive learning environment

and adopting techniques to increase involvement and engagement. The findings are consistent with the teacher's response on the importance of a good home-school collaboration to achieve outstanding results for children with ASD in virtual learning settings.

Conclusion

In the distance learning setup, it was reported that there were difficulties in providing students who are children with ASD with lessons that keep the students participative during class. This is due to the specific characteristics shared by children with ASD such as experiencing difficulties in changes to routine. The difficulties were further magnified during the online distance learning setup due to the inability for the teachers to be hands on and provide the special attention and guidance needed by children with ASDs from their teachers under special education. Thus, this led to reported regression in the behavioral progress of many children and difficulties faced by parents in assisting their children with their online classes.

Through the study, different perspectives of special education teachers and parents of children with autism spectrum disorder (ASD) regarding teaching strategies that resulted in the improvement of student participation in online learning settings were collected. Successful approaches, determined through cumulative analysis, include incorporating immersive activities tailored to the child's interests, gradually introducing more challenging tasks, and utilizing visual aids in online classes. Examples of such strategies being put into effect is correlating the lesson questions to the child's favorite cartoon while establishing boundaries in the discussion to ensure that the child can still focus on the task at hand to be performed. These reported strategies yielded positive results for the teachers, fostering enhanced student participation and adapting to the unique needs of children with ASD. Additionally, data collected from the parents regarding their experiences in aiding their children in the online distance learning setup support the statements made by the teachers as being effective strategies in increasing student participation.

The results of the data collection from the teachers suggested the importance of coordination and constant communication between the parent or guardian assisting the child with the teacher. This is a necessity to help the teacher monitor and maintaining the progress made through both the children's academic and behavioral lessons.

The researchers were able to gain information to be able to achieve the objectives of the study. With the information that the researchers gathered from the interviews, it was determined that some of the problems teachers and parents have encountered

during the distance learning of children with ASD were technical difficulties, behavioral issues of their students, and different distractions that their students face which have hindered their focus. Furthermore, special educators that handled children with ASD were able to share their personal strategies during distance learning to be able to mitigate the participation of their handled students. As previously mentioned, the use of gamification strategies, together with routined tasks that were maintained, had positively impacted the participation of students during distance learning. Moreover, the educators and parents have also shared strategies that were performed at home in increasing student participation in which they have shared experiences that relate to the instigation of participation from their child. Parental involvement was the main strategy that was used to allow the students to remain focused during their classes regardless of distractions that they may encounter. Additional strategies that were determined include proper communication with the children with ASD and designation of a place mainly for distance learning.

The findings of this study will be able to help educators and parents of children with ASD in developing or improving their teaching methods and approaches. Additionally, the findings of this study can be implemented by school administrators with special education units in lesson plans to benefit their students in attaining effective distance learning education given the specific needs and characteristics of children with ASD.

Recommendations

The researchers recommended other researchers looking to perform studies with a similar topic to cooperate with organizations and communities that assist families and people with ASD, such as community Facebook groups, ASD organizations, and special education institutions to help reach the target demographic. The researchers may also provide rewards like gift cards or discounts to encourage study participation.

Future researchers may focus on and further explore possible factors and other aspects such as the impact of culture and long-term outcomes. Additionally, the research can be enriched by sitting in on online distance learning sessions for children with ASD to allow for first hand accounts of the children's class participation given the teacher's strategies and methods. Furthermore, future researchers may also focus on children with ASD of different characteristics by narrowing the scope to only include children based on factors such as age and socio-economic situation.

Conflict of Interest

There is no conflict of interest by the authors in this manuscript.

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