

Virtual Learning Challenges for Special-needs Students: Study in Early Elementary School Age during the Covid-19 Pandemic

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ABSTRACT

Special-needs students experience developmental and instructional problems, but not many focus on early elementary school, especially during the Covid-19 pandemic. Students with special needs at seven private primary schools in Probolinggo Regency, Indonesia, are the focus of this research, which aims to identify the challenges they confront throughout the distance learning process. A case study approach was used in this research. The participants in this research were seven parent-teacher pairs. Demographic data were collected in this research and an interview was conducted using a standard format. This research used content analysis as an analytical approach. Standardized interviews have shown that academic, social-emotional, and linguistic development are the most common issues that parents and teachers encounter in their work with children. On the other hand, educational difficulties were often associated with classroom involvement. According to the findings of this study, children with special needed have difficulty developing academically, socially, and linguistically. It revealed that inclusive students struggle with technology use, participation in online classes, and attention management. This research is limited to early elementary school participants who were interviewed using standardized interviews. Suggestions for future researchers, teachers, parents, and the government are also given so that distance learning for special-needs students can be held better.

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1. INTRODUCTION

Schools around the world were forced to close due to the rapid spread of Covid 19, including elementary schools in Indonesia. The school closure is expected to reduce social distance between students. Information and communication technology (ICT) for social distancing will help flatten the curve and reduce the death rate from COVID-19 infection (Suppawittaya, Yiemphat, & Yasri, 2020). As a result, a new learning process perspective will emerge in primary schools, which will change existing rules, laws and learning platforms to address the problem (Basilaia & Kvavadze, 2020). The COVID-19 outbreak necessitated the use of virtual learning as an alternative teaching approach for elementary school students (Mithhar, Agustang, Adam, & Upe, 2021; Rafiq, Boeriswati, & Usman, 2021).

Distance learning requires teachers, students, and parents to take advantage of digital technology and global classrooms. This can be achieved through the use of various online media such as Google meetings, Zoom, WhatsApp, and other online communication tools (Almarzooq, Lopes, & Kochar, 2020). On the other hand, obstacles with child discipline, technological competence, signal interference, and barriers between parents and teachers are only some of the difficulties parents and teachers will face when trying to help students study at home during the Covid-19 outbreak (Bahar, Iswan, & Sundi, 2021).

Students with special needs at the early elementary school age require them to make attitude adjustments because of the new environment in which they learn. The transition from kindergarten to elementary school is one of the most important life stages for children (Ghufron, Rulyansah, Ananda, & Fadhilaturrehmi, 2022). In early elementary special education, the use of computer-aided tools could help impaired students become more engaged in their learning activities and gain more confidence in their ability to learn. Students with special needs in early elementary school, still need to be directed, accompanied, guided and evaluated in learning by accompanying adults

Students with special needs are experiencing a number of challenges in virtual learning during the Covid-19 pandemic. Students with special needs must work extra to adapt to a new atmosphere of learning, namely virtual learning. Behavioral difficulties in children with autism spectrum disorders have been shown to worsen during the home study period (Singh et al., 2020). The activities of children with attention deficit disorder and hyperactivity develop as their impulses increase, making it difficult for parents to engage these children in meaningful activities (Cortese et al., 2020).

The importance of the topic of virtual learning for students with special needs has attracted a number of researchers to complete their research in previous years. Yuksel, Coban, & Yazici (2021) identified learning difficulties of general elementary school students with special needs in Turkey during online learning. This research reported that students with special needs have challenges in using technology, socializing virtually and communicating face-to-face. Furthermore, Soedjono, Yusuf, & Yuwono (2022) reported that special education teachers expressed their dissatisfaction with online learning because it was ineffective and meaningless for students. On the other hand, in learning mathematics, Kadarisma & Juandi (2021) explained that at the beginning of the pandemic, online learning had been implemented, but the rules applied in schools became chaotic, students could not focus during video conferences, and students' cognitive abilities decreased. Harahap et al. (2021) further reported that learning media, parental attention, study time, environmental conditions, and understanding are some of the aspects considered in evaluating the elements that drive the decline in interest in learning for students with special needs during the Covid-19 pandemic. These previous studies clearly illustrate the interest of this topic to be studied, however, there is very limited relevant research information that discusses the learning difficulties of students with special needs focused on the early elementary school age.

The purpose of this study was to identify the difficulties faced by students with special needs in early elementary school age during the distance learning process in seven private elementary schools in Probolinggo Regency. To achieve these objectives and guide the course of the research to be more focused, the following research questions were formulated.

- a. What developmental problems do students enrolled in the special needs student register face when studying online?
- b. What are some of the instructional challenges enrolled in inclusive education face when studying online?

The significance of this research can be seen from various perspectives. This research provides information on what aspects are difficult to develop in students with special needs in early elementary school age while implementing virtual learning. The use of technology, participation in online classes, and attention management are also instructional challenges experienced by students with special needs in early elementary school age. These topics have not been widely reported by previous studies.

2. METHODS

Research design

During the COVID-19 pandemic, students with special needs in seven private elementary schools in Probolinggo Regency experienced difficulties with distance learning. Using a qualitative research approach called a case study, this investigation looks at how parents and teachers view the education system. A case study is a method researchers use to gather data regarding real-world situations, such as a current limit system or a large number of finite systems throughout time, and then provide scenario explanations or themes based on the findings. (Showkat & Parveen, 2017).

Research Group

This research employed a purposeful sampling strategy known as maximum diversity sampling to locate and select study groups. When doing research on a subject, it is important to have a sample size small enough to reflect a broad variety of potential participants (Ritchie, Lewis, & Elam, 2003). Based on their interactions with teachers and parents, inclusive students were surveyed as part of this study's methods to optimize sample to see what challenges they experienced as a result of this procedure. For this reason, seven instructors and parents of special-needs pupils were questioned. The participants' demographics are shown in Table 1.

Table 1. Study Group Demographic Profile

Types of Students with Special Needs	Child Gender	Age of Child (Years)	Gender of Parent	Age of Parent (Years)	Gender of Teacher	Age of Teacher (Years)	Teacher's Last Education
ADHD-LD	Boy	7	Woman	32	Woman	39	Bachelor
LD	Girl	7	Woman	33	Woman	37	Bachelor
ASD	Boy	7	Woman	33	Woman	36	Bachelor
ADHD-LD	Boy	7	Woman	34	Woman	37	Bachelor
LD	Girl	8	Woman	35	Woman	38	Bachelor
LD	Boy	8	Woman	34	Woman	39	Bachelor
LD	Girl	8	Woman	33	Woman	38	Bachelor

Information:

LD: Learning Disability (children have difficulty learning even though they have an average to superior IQ)

ADHD: Attention Deficit Hyperactivity Disorder (children who have difficulty paying attention)

ASD: Autism Spectrum Disorder (children with language and social disorders)

Data Collection Tool

The researchers designed a demographic data collection form for use in the research data collection instrument. In addition, expert advice was used to develop and refine standard interview questions. The next section contains a brief description of the data collection tools.

Demographic Information Form

The gender and age of the kid, as well as any special requirements, are all recorded on this form. In addition, parents' age, gender, and education level were recorded. In addition, they were asked about the number of children in their class, the number of children with special needs, and the teacher's age, gender, professional seniority, and education level. Students with impairments and their teachers were also questioned about the frequency with which they attend distance learning sessions and about any extracurricular activities.

Standard Interview Questions and Data Collection

Parallel questions were written for parents and teachers who reported difficulties their children/students faced during the pandemic. Research was conducted during the months of March and July of 2020. Parents were interviewed in March 2020, and instructors were interviewed in July 2020. All researchers were divided into two groups to conduct interviews (Research group two, O.1- O.3 and G.1-G.3, Research group one, O.4-O.7 and G.4-G.7).

Two interviews were conducted: one with the child's parents to determine the child's developmental issues, and one with the pupil 's teacher. Individual interviews were done through Zoom as a result of the pandemic's restrictions. It was made clear to participants that their discussions would be documented, and only after they granted their informed permission did the recording begin. To begin the discussion, instructed to read the previously sent consent form aloud and confirm that they were ready to involve in the research.

Data analysis

Parents and teachers of pupils with special needs are interviewed as part of this research, and data is analyzed using a content analytic technique to understand the obstacles they encounter during this epidemic. The content analysis approach is used for this research because it allows researchers to combine data that are similar to each other in a particular field on the basis of certain ideas and topics, and then put that data into a form that can be understood by the reader (Özyurt, Özyurt, & Aras, 2019). The following is a summary of the stages in the data analysis process carried out:

- The data was transcribed and analyzed in two phases since it was gathered in two different ways. The "Academic Issues" and the "Instructional Issues" folders have been established separately. The transcribing of academic difficulties was accomplished within a month of data collecting. Individual files for each teacher and parent who was asked were then created. Each interview transcribed in a Microsoft Word file was labelled O.1, O.2..., O.7 for parents and G.1, G.2..., G.7 for teachers. The instructive problem was then solved using the same procedure. This time, the transcription process took three weeks, and the naming method used was the same (O.1-O.7 and G.1.-G.7). This technique was performed by both the study's first and second authors.
- Upon completion of transcription, the authors of all three studies confirmed parent and teacher transcripts.

It was then up to the three writers to sort and classify the data separately once the transcribing and validation procedure had been completed. It was at this stage that researchers began discussing the themes and patterns so that they could agree on the areas of disagreement. After settling on a code and a topic, researchers were able to complete their findings.

Validity and Reliability

In qualitative research, the goal should not be to generalize the findings to certain other settings and situations, but more to transfer the discoveries to a similar context (Shenton, 2004). To establish external validity in this investigation, clear descriptions and deliberate sampling are recommended. Research in qualitative methods requires researchers to demonstrate the validity and relevance of findings and data collected through various data collection methods to the intended audience of

research (Cypress, 2017). The better the researcher is at this, the more trustworthy the study is internally. Internal validity was ensured in this study by expert judgment and participant confirmation. In qualitative research, reliability requires researchers to corroborate research findings using the data obtained (Anney, 2014). The external reliability approach of this study is a brief confirmation.

3. FINDINGS AND DISCUSSION

Under the topics of developmental and instructional issues, the findings of the investigations are presented. Samples were taken from the teachers and parents of the same kid while giving evidence from participant answers.

Developmental Issues of Students with Special Needs

Figure 1 depicts the viewpoints of both teachers and parents about the challenges faced by special-needs pupils during the pandemic period.

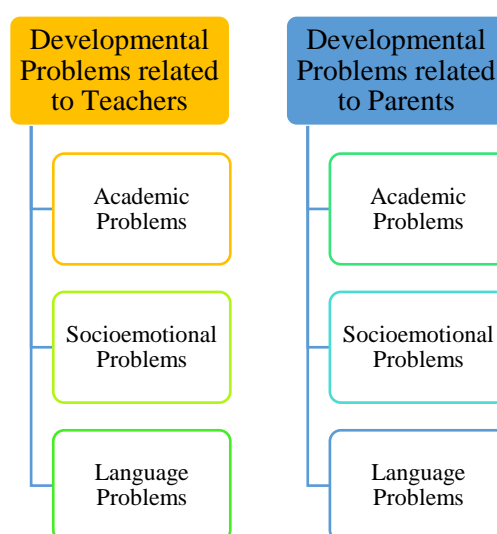


Figure 1. Students with Special Needs Face Developmental Barriers

When referring to Figure 1, it is easy to see that the comments from both teachers and parents fall into same three categories. These categories include challenges with student achievement, difficulties with emotional and social development, and problems with language acquisition. Following that, a more in-depth discussion of these ideas will follow.

Academic Advancement-Related Issues

According to the results of the interviews, both the parents and the teachers of pupils who have special challenges are especially concerned about the development of academic abilities in these pupils. Children were reported to have learning challenges, to have performed below ability level, and to have trouble grasping complicated concepts. This was one of the answers that was given the most often. In addition, both parents and teachers indicated that when students received distance learning, their desire decreased, and there were also problems with their reading ability. The following are some examples of statements about this:

My son is unique among all the other children I have ever met. When it comes to being a victimized parent, I believe I am one of the worst. He got help at school for his writing difficulties, but once the pandemic closed his school, he remained the same [not making any progress]. First graders can write better than my son, so I finish most of his writing assignments and then he reads to his teacher. I didn't try to hide it from the teacher, who was also aware of it... (O.1)

The child's academic growth is below average during this time span. Usually, we progress from lower grades to upper grades with my students; this procedure stabilizes the level; I can't take this level too far. (G.1)

Challenges Associated with Children's Social and Emotional Growth

When the viewpoints of teachers and parents on this topic are contrasted, it becomes abundantly evident that both groups are concerned with the social environments, emotional responses, and behavioral issues that students exhibit. Both parties claimed that children's relationships with their peers had worsened during this time period, as well as that they had become more introverted as a consequence of their increased use of technology, became angrier, did not encounter the behavior that was expected of them, and did not interact. The following are some examples of statements about this:

My son is quiet and sensitive. His absence from school has annoyed him greatly during this pandemic, as he is unable to spend time with his friends. (O.6)

He felt very lonely as a result of his ostracism. He instead spoke to the students in his brother's class. He appears to be somewhat broken up within the family, unfriendly, and unable to express himself, even when injured. We urged him to socialize with his friends last year, but due to the pandemic, his sociability has declined again. (G.6)

Problems Related to Language

The parents and teacher of one of the students (O.5, G.5) expressed their concern about the child's difficulties in language development. They mention the following about this issue:

There were some things he couldn't reveal. He previously had dental problems, which resulted in a speech impediment. He was so self-conscious at the time that he avoided communication, and during the era of distance schooling, he became more introverted due to his lack of communication. (O.5)

Language is the main problem. He suffers from an inability to communicate himself, defend his rights, and determine when an event occurs. He tries to be open at the same time that the distance learning program is starting. He is trying to communicate and also trying to finish his research project. (G.5)

Challenges Facing Students Who Have Special Needs in Their Learning

The views of parents and teachers, as seen in Figure 2, are presented as an illustration of the educational problems that are confronted by children with special needs throughout the epidemic process.

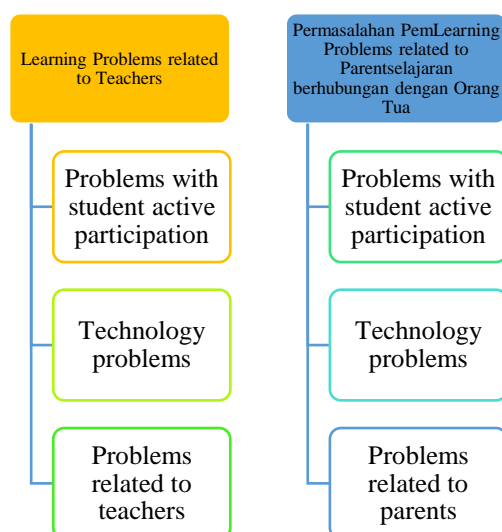


Figure 2. Special-Needs Students' Learning Difficulties During the Pandemic

Observing Figure 2, it is evident that the obstacles identified by teachers and parents may be divided into three categories: concerns with class participation, technological problems, and issues relating to the interaction between instructors and parents. These concepts will be further upon in the following sections:

Difficulties Regarding Class Participation

According to their parents and teachers, children with special needs have difficulty adapting to distance learning and prefer to remain "in the background" with a classmate when requested to participate in online courses. In the next lines, this concept is elaborated:

We had no problems with the connection [to the course]; instead, we have issues with him staying up late and waking up late all day. As a result, my toddler refused to attend the session earlier that day because he was still sleepy. We had the same predicament, and he was increasingly refusing to go to school. (O.3)

He is not a member of a class group participating in distance learning. If he enrolls in distance learning with a private tutor, he may be able to study the material more effectively. (G.3)

Technology Challenge

It appears that the responses of parents and teachers to technology-related difficulties center on their inability to utilize technology tools and their technology addiction. The following is mentioned in this regard:

He always wanted a phone and a computer; his life revolves around them. However, the pandemic has created an addiction in my son; he is always on the internet, looking for things that interest him. He spends a lot of time watching games and has a much better understanding of computers than I do. He, on the other hand, couldn't stop using the computer; actually, we went to the village to find a computer to play with. We couldn't go out and play much because of the virus; I have a newborn and there is a pandemic, so we can't travel and I am responsible for my baby. This is why he gave up on computers. (O.1)

When I talked to her mother, she said that she was very addicted [to using the Internet]. In addition, I believe that he is sometimes disinterested in lessons and instead engages in telephone games. (G.1)

Problems related to teachers/parents

The majority of parents and educators do not explicitly say that they have conflicts with each other. However, there are also those who mention communication difficulties and the emergence of certain conflicts. The following example illustrates this situation:

It seemed like there was something blocking our view of the instructor. I can't communicate the way I would want to. I had a great deal of anxiety about communicating with him in almost the same manner that I had spoken with my child's previous teacher. We are having communication difficulties. Sometimes, when my child won't do anything, we have to force him. (O.5)

When I can't attend lessons, I send homework via WhatsApp, but he never turns in the completed assignments. In addition, the research work and poetry learning activities that I assigned were carried out only during class. (G.5)

The COVID-19 pandemic has adversely impacted human existence in a number of ways, including severely disrupting field education. There are a few different ways and solutions that have been devised in order to keep the education system running smoothly, and several governments have made an effort to put them into practice. The distance learning system is designed and implemented in Indonesia to provide educational services.

This sudden and fundamental shift in approach has an impact on students, their families, and teachers. Undoubtedly, students with typical developments experience difficulties during emergency distance learning procedures, as do students with disabilities. An investigation on the challenges that

were encountered by children who had special requirements during the implementation of the remote learning process in the Probolinggo Regency during the COVID-19 epidemic was carried out by evaluating the points of view of both parents and educators. Two main themes emerged: developmental issues and instructional issues.

The study found that both parents and teachers of children with disabilities overwhelmingly place academic skills as a developmental issue. According to the findings of the study, children who participate in inclusive education perform at levels of performance that are below those anticipated of them, have difficulties learning, have increased levels of impairment, and have less interest in academically unfavorable subjects. This is noticed not only in children with severe difficulties, but also in children who are usually developing. Hebebcı, Bertiz, & Alan (2020) revealed that teachers highlight specific difficulties associated with online education, whereas Page, Charteris, Anderson, & Boyle (2021) find that students with special needs suffer academically and emotionally. Toquero (2021) found that teachers claim that special education students have comparable challenges during distance learning, but Sholikhati, Prayogo, & Santoso (2021), Asri, Cahyono, & Trisnani (2021), and Supratiwi, Yusuf, & Anggarani (2021) found that learners with special needs have difficulty with online learning. It is common knowledge that in accordance with the Personalized Education Plan designed for children who have special needs, children are expected to have instructional adaptations that call for one-on-one contact between students and instructors. It is possible to believe that students cannot acquire a satisfactory level of knowledge through distance learning because of the emergence of many elements. According to teachers and parents interviewed for this study, some children who receive inclusive education through distance learning experience socioemotional difficulties such as boredom, impatience, introversion, or sobbing. Neece, McIntyre, & Fenning (2020) revealed that During the pandemic phase, persons with developmental impairments had emotional difficulties, which led in higher levels of boredom, discontent, dread, and anxiety in these individuals. These results corroborate the conclusions of this investigation. Similarly, Imran, Zeshan, & Pervaiz (2020) and Lee, Ward, Chang, & Downing (2021) found that during a pandemic, kids with special needs exhibited an increase in irritability and anger, as well as a shift in their eating behaviors. As was mentioned before, Page et al. (2021) found that students with impairments often struggled with their emotions. The findings of this survey revealed that there was just one parent-teacher pair that reported having issues in terms of their child's language development. The study was conducted in the United Kingdom.

When instructors and parents were questioned about students' difficulties in learning, the majority of respondents claimed that children who were getting inclusive education were hesitant to take virtual classroom classes because they did not even want to. As a consequence, they were distracted, and it was reported that their learning efficiency had dropped. Students with special needs were shown to be unwilling to participate in academics, to have higher behavioral challenges, and to have less support for their academic success in research that was carried out by Yuksel et al. (2021). The study was carried out with the participation of both teachers and parents. A similar finding was made by Cicekci & Sadik (2019), who discovered that certain students had trouble paying attention and were unable to write notes during sessions.

When the technological status of students getting inclusive education throughout the pandemic remote learning process was evaluated, a gap formed between those who acknowledged encountering no issues, individuals who were unable to utilize technology equipment independently, and for those who faced difficulty connecting to the Internet. Additionally, during this time period, there was a rise in the usage of social media, which led to some youngsters developing an addiction to technology. Similar findings were reached in a study conducted by Aguilera-Hermida (2020) and Coman, Țîru, Meseşan-Schmitz, Stanciu, & Bularca (2020), where it was underlined that the efficient use of technology is necessary for successful teaching during the pandemic phase, as is the case for constructive contact with the student's family. In a study conducted by Kawasaki et al. (2020), the teacher said that collaboration with parents was very important. Tosun et al. (2020) found that

Students who received their special education via online networking and mobile devices were also constantly linked to the EBA program, which made their dependency on technology even worse. The findings of this study indicate that both teachers and parents support each other during the distance learning process and that they do not face serious challenges together.

As part of the investigation into the observed issues, the teacher highlighted the engagement of families in the class and their inability to provide sufficient care for children, while the families noted the communication challenges they had with the instructor and the realization that their assumptions were slightly different from reality. With these findings, Mishra, Gupta, & Shree (2020) found that despite the challenges families had with assignments over the course of remote learning, they were pleased with the communication and patience given by the instructor.

4. CONCLUSION

The goal of this research is to examine the difficulties that students with special needs have when engaging in remote learning at seven private primary schools in the Probolinggo Regency. The domains of intellectual, social-emotional, and linguistic development are the ones where parents and instructors see the most difficulties in their students' growth. On the other hand, educational difficulties are often associated with classroom involvement. According to the findings of this study, children with special needs have difficulty developing academically, socially, and linguistically. It revealed that inclusive students struggle with technology use, participation in online classes, and attention management.

This study explores the developmental and learning difficulties faced by inclusive students at the Probolinggo District Environmental primary school during the pandemic, as experienced by their parents and teachers. After conducting a thorough review of the relevant research, it was discovered that no comparative studies had been carried out between the points of view of students who had special requirements and those of their teachers. However, in this study, parents and teachers were questioned, and then the data were compared for each child in order to acquire data that was more accurate. On the other hand, every special need group calls for a different kind of care throughout the developmental stages. In this study, participants came from a variety of backgrounds; however, in further investigations, special needs groups might be established. Additionally, this research makes use of standardized interviews; nonetheless, it is possible that semi-structured interviews may have been more efficient in acquiring the data being sought for.

This research presents an evaluation of the problems faced by students with disabilities at the Probolinggo Regency environmental school in connection with the online learning system implemented during the COVID-19 pandemic. The study was carried out by taking into consideration the viewpoints of both parents and educators. As a consequence of this finding, it was discovered that learners with special needs suffer with academics, socioemotional development, and language development. It is possible that the local City Education Office will be capable of developing special programs targeted at enhancing children's academic potential, and that teachers will be able to begin teaching learners with special needs ahead of the start of the general educational calendar in order to reduce the likelihood of such challenges occurring. In addition, these children may attend play groups to help with their social language development.

The findings of this study revealed that inclusive students struggled with using technology, participating in online courses, and maintaining their focus. As a result of the likelihood that this circumstance may accentuate existing inequities between inclusive students and their fellow students, it is possible that intensive individual training will be made available to these children once traditional classroom instruction resumes. On the other hand, if the use of online education is to be maintained, these youngsters may be given individual teaching before and/or after participating in group classes. In terms of educational challenges, this research came to the conclusion that there are unique issues to consider with respect to both parents and instructors. In order to prevent issues like these in the future, it is imperative that parents and instructors carefully plan out the steps involved

in online education and formulate an actionable game plan at the beginning of each semester. By strengthening everyone's comprehension of their respective roles and responsibilities, communication problems may be prevented in this manner.

According to the study's results, the study group included parents and teachers of special needs children. To further understand what is needed, future studies should concentrate on a single need category (such as those with very exceptional needs or those with more severe disabilities). In addition, it is possible to have talks with parents and instructors in the form of focus groups.

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