Stakeholders' Views on Strategies, Measures and Policies Implemented in Education of Students with Disabilities during the COVID-19 Pandemic in Greece

Theodora Papazoglou, Stavroula Kalaitzi, Filippos Papazis, Anastasia Vlachou[1], Lia Tsermidou, Anastasia Toulia, Aristea Fyssa

Abstract

PURPOSE. The pandemic crisis outbreak had a severe impact on all aspects of people's lives worldwide. Educational systems applied across the globe, were forced to adapt to new, restricting conditions overnight changing abruptly the educational landscape, especially for students with disabilities (SwDs). The lack of central preparedness strategy and the unprecedented conditions called upon the experts, administrators, teachers and parents/carers to interpret and implement strategies, policies, and measures challenging progress conquered in the past years in inclusive education. The aim of the present study was to investigate the experiences and views of key-stakeholders in special and inclusive education in Greece (experts-regional coordinators, administrators, parents/carers) on strategies, measures and policies implemented in education of SwDs during the COVID-19 pandemic crisis and to explore potential perspectives emerged in safeguarding the special and inclusive education in crisis times.

METHODS. An exploratory qualitative study using semi-structured interviews was applied. The participants of the study were 31 key-stakeholders in total (11 experts-regional coordinators, 10 administrators, and 10 parents/carers who have children with disabilities). Interviews were conducted via video conferencing platforms using three different interview protocols designed by the research team for the purposes of the study. Qualitative data were collected and analyzed using content analysis.

RESULTS. The findings reveal both similar and diverging approaches among the stakeholders regarding the strategies, measures and policies as well as concerning the surfaced challenges and proposed recommendations. Emphasis by the stakeholders is given to the lack of systematic recording of needs and preparedness plan before the pandemic outbreak. The lack of central guidance and support is identified as a major aggravating factor regardless of the initiatives taken at individual or local level to promote learning of SwDs. All stakeholders acknowledged the need to develop and use an applicable preparedness plan for schools during crisis, in order to maintain and promote further equal access to education for all students.

CONCLUSION. The key-stakeholders of the special and inclusive education in Greece have similar and diverging views on how the special education challenges were addressed during the pandemic crisis. However, all parties concurred on the pressing need for a preparedness plan to be applied to all schools in case of a future crisis.

Keywords: special-inclusive education, pandemic crisis, preparedness

---

[1] Corresponding author: anavl@eds.uoa.gr

Points of Interest

- The present paper presents the views of key-stakeholders regarding the strategies, policies, programs implemented for the education of SwDs during the pandemic crisis in Greece.
- The importance of the study lies in the fact that primary data were collected from the full range of key-stakeholders (teachers/professionals, administrators as well as parents/carers) in inclusive education.
- The results show views on the following central themes: preparation and operation of schools, educational practices and material, measures, services, educational programs, interventions, emerging needs of SwDs, as well as challenges, recommendations, and feedback.
- The results reflect an interesting canvas of similar and diverging views across the involved key stakeholders in the education of SwDs during the pandemic crisis.

Introduction

The COVID-19 pandemic (World Health Organization [WHO], 2020) had arduous impact on every aspect of peoples' lives worldwide. Education and especially the education of students with disabilities (SwDs) was seriously affected. The organization and delivery of education had to adapt to the new conditions overnight. The stakeholders (students, teachers, parents/carers, administrators as well as policymakers) were confronted with an unprecedented reality without being prepared or organized beforehand.

According to literature, school closure caused by the COVID-19 pandemic has affected over 1.5 billion students and families worldwide (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). The COVID-19 pandemic presented multiple challenges for teaching students with disabilities, such as working in a non-friendly online instructional environment and/or in challenging in-person conditions. On top of this, there were limited to zero opportunities for collaboration, training, and communication with special and regular education teachers compromising, thus, the educational and psycho-social needs and demands of the students (Smith, 2020).

The COVID-19 pandemic, the school closure and distance learning, posed barriers and unsurmountable difficulties for students with disabilities in many European countries, including Greece. To be more specific, SwDs reported problems in the social domain due to the limited contact with classmates and teachers (Madaus et al., 2021). Moreover, several challenges surfaced regarding the learning environment and the technical equipment. For example, many students faced technical difficulties and lacked the necessary equipment during distance learning. Furthermore, some students with disabilities became less motivated to participate in distance learning compared to in person teaching (Supratiwi et al., 2021), they experienced higher rates of absenteeism, incomplete homework assignments, and their learning experience was limited (Madaus et al., 2021; Mohammed Ali, 2021). In many cases students needed the support and presence of an adult during distance learning with questionable availability from their side (Novianti & Garzia, 2020; Sari & Maningtyas, 2020). Serious problems appeared in the accessibility of the platform for distance learning as well as the accessibility of the activities used (European Agency for Special Needs and Inclusive Education, 2022). Many learning tools, platforms, and activities were not accessible for students with disabilities (SwDs). Teachers and students also reported challenges due to limited digital skills (Denisova et al., 2020; Kim & Fienup, 2022).

The COVID-19 pandemic crisis attracted researchers' attention, and many studies investigate the quality of the education for SwDs as compared to their non-disabled peers during the pandemic (Toquero, 2020). According to literature, distance education set barriers to the learning of SwDs, and in some cases there were students that were excluded from the distance learning process (Ayda et al., 2020; Brennan, 2020; Porter et al., 2021).

It should be noted that many barriers and difficulties were expressed by students, teachers and parents concerning distance learning (European Agency for Special Needs and Inclusive Education, 2022). Korkmaz & Toraman (2020) argue that that COVID-19 pandemic triggered the educators, parents and especially policy makers to realize the deficiencies of the education of students in online environment, and the lack of preparedness to deal with a pandemic-level crisis, as well as the need for digital skills training.

In order to address the educational needs of students with disabilities, several measures were implemented. According to the European Agency for Special Needs and Inclusive Education (2021), in many European countries psychological counseling and support was available for students, parents and/or teachers. There were also some measures to compensate for barriers and challenges. For example, specific financial resources were offered for computers and digital material for students from socio-economically disadvantaged backgrounds. On the same note, some socio-educational services were available to students with disabilities. Training for teachers was offered regarding pedagogies, digital skills, distance learning tools, accessibility issues and improvement of communication with families. Moreover, many guidelines were available to teachers regarding online teaching, during the COVID-19 pandemic. Support services involved some individualized meetings with students, and online educational material (Meda & Chitiyo, 2022).

Research contend that, many students with disabilities did not receive the same quantity or quality of specialized support services and therapies, compared to those received before the pandemic (Mantzikos & Lappa, 2020; Morando-Rhim & Ekin, 2021). Initial challenges fueled the rapid development of positive, meaningful changes in service planning in some states in USA (Armitage & Nellums, 2020; Guterres, 2021). However, in most cases these measures were not systematic, structured and focused on local or national necessities. International collaboration or reference to international standards or recommendations was absent (European Agency for Special Needs and Inclusive Education, 2021).

In the current paper we focus on the Greek educational context for students with disabilities exploring the views of key stakeholders (experts, administrators, and parents/carers with children with disabilities) regarding the measures and support of students with disabilities during the COVID-19 pandemic crisis in Greece. The aim of the study is to shed light on the challenges surfaced in an unprepared educational system and to explore potential perspectives in safeguarding special and inclusive education in crisis times.

Methodology

The present study is a part of a large research program called "AlDiSo" which was funded by Hellenic Foundation for Research and Innovation (HFRI) and was officially launched on July 2022 (https://aldiso.eds.uoa.gr). The researchers undertook an exploratory qualitative study using semi-structured interviews in order to place people in the context of their lives and the lives of those around them (Creswell, 2012). Such a methodology enables a comprehensive understanding of the school's preparedness context in pandemic times as experienced by Greek education administrators and education coordinators, school experts, administrators and parents/carers who have children with disabilities.

Study Design

In the present study we used qualitative research methodology and a non-experimental, descriptive research design. More specifically, thirty-one semi-structured detailed interviews were conducted with Greek key stakeholders. The stakeholders involved 'experts,' 'administrators,' and 'parents/carers.' The participants were selected in terms of their geographical position in order to obtain a balance between the different geographical areas of the country (i.e. South, Central and Northern areas of Greece).

Research Questions

The aim of the study is to identify and assess the psycho-social and educational needs of students with disabilities (SwDs) during pandemic crisis, as well as map existing strategies, measures, and policies.
The research questions addressed were according to key stakeholders:
1. Which strategies, measures and policies were implemented in education of SwDs during the COVID-19 pandemic in Greece?
2. Which challenges emerged from the implementation of strategies, measures, and policies during the COVID-19 pandemic in Greece concerning SwDs?
3. What are the recommendations for enhancing preparedness of schools in case of a future crisis?

Authors critically evaluate and contextualize the findings to gain in-depth understanding of the strategies, measures and policies implemented in education of SwDs during the COVID-19 pandemic in Greece.

Participants

Geographically defined educational areas were conveniently selected in Greece for the sample, with the aim to achieve geographical and area of responsibility balance. Several eligible educational organizations operating in the selected districts were identified representing the roles of education administrator and education coordinator, as well as experts in the general and special education. Also, parents/carers who have children with disabilities, attending both regular and special schools were selected from different areas in Greece. Table 1 presents the key stakeholders who participated in the study.

Table 1
Participants by Stakeholder Category

Participants by stakeholder category		
Experts	Administrators	Parents/carers
Head of Public Offices for Diagnosis of Disabilities or/and Special Educational Needs (KEDASY)	Principals of Special and/or Regular Education Schools	Parents/carers who have children with disabilities in general/special education.
Coordinators of the Office for Educational Projects for Primary Education Teachers (PEKES)	Head of the Department for the Protection of the Rights of Students with Disabilities—Special Education Department of the Ministry of Education	Examples of disabilities and special educational needs: Attention deficit disorder—ADHD, autism, learning disabilities, Down Syndrome, health problems
Coordinators of the Office for Special Education Programs (PEKES)	Director of the Office in each region that is responsible for the coordination of all the primary schools in the specific region	
Experts ($n = 11$)	Administrators ($n = 10$)	Parents/carers ($n = 10$)
Entire sample of participants—stakeholders ($n = 31$)		

Snowball sampling was used to identify participants in the research team members' networks, rippling outward to wider networks of linked colleagues and organizations. Eleven experts-education coordinators, ten administrators and ten parents/carers who have children with disabilities responded positively and were included in the study. The purposive sampling of interviewees was deemed also sufficient and proper to ensure the best possible insights because of their responsibility scale, their contextual familiarity, and their representativeness in relation to the explored phenomenon. General information was collected including assigned pseudonyms, gender, studies, specialization, years of experience, division/domains of duties. Regarding the parents' basic information, we collected data such as assigned pseudonyms, gender, age, school class, type of their child's school, and type of disabilities.

It is worth noting that in this study we wanted to focus only on experts, administrators, and parents/carers who have children with disabilities. However, since this is part of a larger project, teachers and principals' views were elicited in another study conducted quantitatively.

Research Tools and Procedure

Ethical Approval

The research team was granted an ethical approval from the research committee of the Department of Educational Studies, National and Kapodistrian of the University of Athens in Greece (NKUoA: 32943/4-4-2022). The approval was granted before beginning the data collection. Informed consent was obtained from the participants before the conduction of the interviews.

Research Procedures

Potential interviewees were approached by phone or email. Prior to the interview, participants were informed orally, as well as in writing, about the study objectives, methods, and data protection. The participants granted their consent and were interviewed with no subsequent dropouts. The participants were interviewed between September 2022 and November 2022. Nevertheless, the authors were in close and continuous contact with the pool of interviewees during the preparatory period of the project, namely during January 2020 to July 2021. Thereby, the interviewees' experiences during the pandemic were kept vivid and evolving along with the pandemic crisis management developments. Besides, the problems related to the interviewees' experiences were not solved or even addressed during that period.

Interviewees were free to choose between a face-to-face interview, a telephone interview or interview via online platform (e.g., Skype, Messenger, Viber, WebEx, Google Meet). All participants opted for conducting the interview via an online platform, and agreed to be recorded via OBS software (https://obsproject.com/). In all cases, both interviewees and the researcher confirmed that nobody else was present during the interview. Interviewees were asked if they wished to confirm transcription output, but they declined due to time constraints. Transcription output was reviewed by two members of the research team. Interviews were conducted in Greek language (mother language of both interviewees and the researchers), and translated into English by a third party. Researchers checked the translated Greek texts separately to increase the reliability of the data.

One experienced member of the research team carried out the semi-structured interviews. Interviews lasted from 45 to 90 minutes. Initially, general information about the participant's profile was queried (Part A of the Protocol). Next, respondents were asked about available strategies, policies, programs, tools, and services to support and meet the educational needs of SwDs during the pandemic crisis (Part B of the Protocol). In the final part (Part C of the Protocol), the participants were invited to share their ideas

on the challenges they experienced and on recommendations for the schools to get better prepared for a potential future crisis.

The interview protocol was developed following the output of a previously conducted systematic literature review pertaining to the research question, set the research scene in three time periods: before the pandemic outbreak, during the first pandemic outbreak—school year 2019-2020, and during the second year of the pandemic outbreak—school year 2020-2021.

The main categories included in the three interview protocols are:

1. Pro-active strategies and measures (pre-existing educational strategies and measures to respond to emergency crises, preparedness plan/protocol).
2. Measures, Strategies, Services, Policies for promoting access and participation of SwDs during the pandemic crisis.
3. Emerging needs of SwDs during pandemic crisis.
4. Educational challenges and difficulties.
5. Recommendations for better level of preparedness in the future.

Research Tools

Based on the review of the literature as well as the aim of the study, three different interview protocols were designed by the research team for the purpose of the study. The basic axis of each interview protocol included sub-axis and open-ended questions, to gain detailed information from the participants and a deep insight of the subject of the research. The basic axes appear in all three interview protocols but differences appear in some sub-axes and sub-questions.

A. Interview Protocol—Experts

1. Preparation and action plan to address crisis situations before the pandemic outbreak (recording of students' needs, directions, preparation).
2. Operation of regular and special schools during the pandemic: School year 2019-2020, and 2020-2021 (online or in person teaching, participation of SwDs, effective and non-effective educational practices).
3. Measures, educational programs and/or psychosocial educational interventions to meet the needs of students with disabilities during the pandemic (measures in domains such as tools and equipment, teaching staff, resources and funding, information and training, accessibility, educational material, support of parents/families).
4. Emerging and unmet needs of students with disabilities during the pandemic.
5. Support services for students with disabilities (learning, socio-psychological domain, technical support).
6. Challenges and recommendations.
7. Feedback (views on the effect of the pandemic, the effectiveness of the measures and given feedback, level of preparedness).

B. Interview Protocol—Administrators

The interview protocol for the experts includes eight axes and the interview protocol for the parents/carers includes six axes. The interview protocol for the administrative staff includes 9 axes, the 8 of which remain the same as the protocol for the experts but we have added one about "Legislation and Provisions regarding appropriate education of students with disabilities during crisis situations such as the pandemic" (new legislation, "gaps" or modifications in existing legislation, adaptation of the curriculum). Also, in the

recommendations section there was one additional question about "what could be done differently in the legislation domain."

C. Interview Protocol—Parents/Carers

The interview protocol for parents/carers who have children with disabilities is shorter but includes similar axes and questions. The emphasis is given to the measures, strategies, services available for students with disabilities during the pandemic crisis. Also, emphasis is given on questions related to challenges, difficulties, gaps and feedback about the effectiveness of the policies and coordination from the State.

Data Analysis

The qualitative data collected from the interviews were analyzed using content analysis (Mayring, 2004). The main purpose of the content analysis was to create a detailed and systematic recording of the results from the interviews of the stakeholders concerning the basic axes, gaining a better and more detailed insight on the subject of the study. Aim is to point out the strategies, policies and measures, and challenges regarding the teaching of students with disabilities during the pandemic crisis.

Following each interview, interviewers noted initial thoughts and ideas. Field notes and transcribed interviews were read several times by the researchers to gain deep immersion in the data. The researcher conducted the interview with the help of two other members of the research team transcribed the interview data, and carefully read and re-read the manuscripts. More specifically, broad categories pivoting around the research axes were initially drafted independently by the two researchers for each of the 31 interviews, using all available data. These were further examined to interpret the content and discover underlying meanings as well as to gain insights on the country-specific interplay and process in shaping social reality. Then, the process included data coding into meaningful groups. All authors analyzed and organized the relations between the categories to verify the internal coherence and consistencies of the categories. Subsequently, the authors extracted the rich information to shed light on the research questions. Finally, the obtained results were exhaustively discussed, and a full consensus on minor disagreements was reached. The analysis strategy applied, strengthened by the different backgrounds of the research team members, contributed to the study's triangulation and supported reliability and validity (Figure 1).

Figure 1
A Word Cloud with the Basic Results from the Interviews
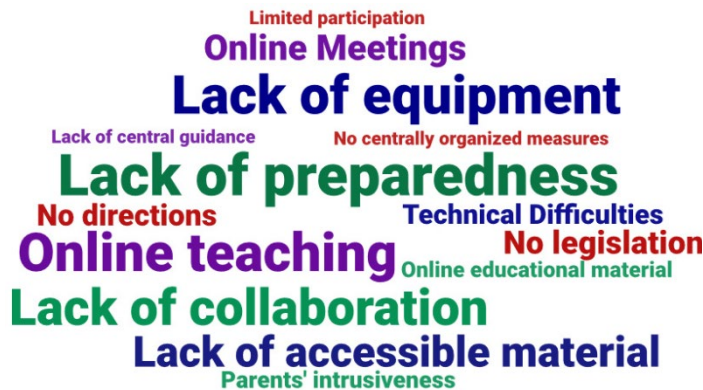
As mentioned above, the current study is part of the broader research program "AlDiSo," and aims to investigate the implications of the pandemic crisis on the SwDs' needs, and the potential preparedness mechanisms to effectively address those needs in potential future crisis. The more extensive project follows a concurrent mixed-methods design. In the broader project quantitative and qualitative methods were equally used with participants from different layers of the school community (i.e. students with disabilities, parents and school principals), and representatives from educational services settled in the periphery of schools. Such a mixed-methods design was built upon the synergies and the advantages of the quantitative and qualitative research methods (Gay et al., 2012), so as to triangulate the findings about the support practices developed by schools, and to what extent these practices responded to needs of SwDs and their parents during the COVID-19 pandemic in Greece. To that end, the research project was developed taking into consideration all involved parties, such as students with disabilities, parents, teachers, administrators, etc., processed the harvested data from all parties and synthesized the proposed recommendations.

Results

Based on the content analysis, interesting results about the stakeholders' views emerged regarding the basic axes and sub-questions included in the three interview protocols. The basic results according to each type of stakeholder are presented in the tables below (Tables 2 to 8).

Table 2
Preparation and Operation of Schools

Axes & Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
1. Preparation and action plan	Lack of an action plan, preparedness protocol and instructions	Lack of an action plan and preparedness protocol and instructions—Only statistical data by Heads of school in the Ministry's "my-school" platform (https://myschool.sch.gr)	Lack of recording of the needs of SwDs concerning the level of preparedness for pandemic crisis
2. Operation of schools School year 2019-20	a. Special Schools: closed for a month with optional distance education b. Regular Schools: closed for about 3 months with optional distance education		
School year 2020-21	a. Special Schools: teaching in person b. Regular schools: compulsory distance education (approximately 5 months) c. Online regional schools for students 'at risk' (e.g., with serious health problems)		

There was consensus among administrators, experts, and parents that there was no action plan, no preparedness protocol and no instructions before the outbreak of the pandemic. There was not also

recording of the needs of SwDs regarding the preparedness to deal with a crisis like the pandemic. All these were obvious in the interviews "We were not ready for a situation like this" (Expert 8), "Only protocols for earthquakes or floods existed but no protocol for pandemic crisis and closure of schools for such a long period of time" (Administrator 2), "We were left alone with no directions, we had to be present at all times for our children to participate in distance education—it was extremely challenging" (Parent 3).

Table 3
Teaching Students with Disabilities

Axes—Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
2.1. Teaching students with disabilities (SwDs)	Individualized online meetings of the student with the special education teacher	Combination of individualized meetings and support in the general class Regional online schools for students with serious health problems–during the second year	No special provision for SwDs Online meetings in separate online rooms Regional online schools for students with serious health problems–during the second year
2.2. Accessible educational material	No central guidance or instructions for ensuring accessibility	Limited online accessible educational material for students with sensory disabilities	No online accessible educational material
2.3. Participation of SwDs	Limited participation especially during the first year		Limited participation and motivation due to the lack of interactive activities
2.4. Effective educational practices	Material on websites (prosvasimo.iep.edu.gr) Activities from teachers in school websites and platforms such as e-me (https://auth.e-me.edu.gr).	Activities from teachers in school website and platforms such as e-me (https://auth.e-me.edu.gr) Not printed material—written activities sent by email Online groups of teachers for the exchange of ideas and educational material	Regional online schools for students with serious health problems–during the second year Online material on educational websites Interactive activities like games, quiz used by some teachers

According to experts, administrators and parents/carers in regular schools during distance education special teachers' role in the regular class was passive, and most of the times they preferred to make individualized meetings with SwDs. "Usually the teachers took the students with disabilities in separate (online) rooms and used individualized activities, there were some great initiatives by teachers" (Expert 6), "Some effective educational practices were the asynchronous educational videos and interactive activities and the online meetings/groups we organized with teachers to exchange ideas and material as well as meetings and constant communication with the parents" (Administrator 7). "In the whole classroom my child could not keep up but was happy to see his classmates" (Parent 2). "The participation was limited, especially during the first year due to technical difficulties and lack of equipment and motivation" (Expert 3), "It was quite difficult for the student with disabilities to participate, distance education did not work for us" (Parent 8).

Table 4

Measures, Educational Programs and/or Educational Interventions

Axes & Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
3. Measures, educational programs and/or educational interventions	1. Instructions and educational material on websites–not in accessible format 2. Training-seminars for teachers 3. Online meetings and telephone communications with parents and teachers 4. Psychological support in some schools with recruitment of additional psychologists 5. Recruitment of substitute teachers to replace those who were sick 6. Lending of equipment (tablets to students based on economic criteria) 7. Voucher to teachers to buy laptop/tablet (but with delay)	1. Online meetings and telephone communication with parents and teachers 2. Individualized teaching to small groups of students 3. Regional online schools for 'at risk' students and teachers 4. Instructions on psychosocial issues and instructions from the Ministry of Education 5. Accessible digital textbooks 6. Accessible material and instructions in accessible formats (Braille, subtitled and easy2read method) on prosvasimo.iep.edu.gr website 7. Educational TV programs (289 programs with subtitles), and educational videos 8. Technical support from the Head of Computer Science in Primary Education Office 10. Lending of equipment for students and teachers 11. Training for teachers on platforms such as WebEx (https://www.webex.com), e-me (https://auth.e-me.edu.gr). 13. Group chats for	1. Information about measures of protection against COVID-19 2. Regional online schools–emphasis on the social domain 3. Lending equipment based on economic criteria 4. Psychological support by telephone line 5. Sending educational material via email or on the e-me platform (https://auth.e-me.edu.gr) 6. Online meetings with parents/ telephone communication 7. Students could go to the schools and connect with help from the teacher 8.Schools were more flexible about absence of some students

	brainstorming	
	14. Recruitment of professionals or educational staff to replace sick teachers or those belonging to "at risk group" or who have had special purpose leave	
	15. New technological equipment in schools	
	16. Voucher 200 euros to teachers for equipment	

Table 5
New Needs of Students with Disabilities

Axes—Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
4. New needs of SwDs	1. To develop digital skills 2. To deal with cases of domestic violence 3. To set limits to the intrusiveness of parents 4. To develop closer collaboration between schools and parents	1. To develop digital skills 2. To teach ways of online safety and data protection 3. To find ways to motivate the participation in online teaching 4. provision for students with chronic diseases	1. For continuous presence of an adult (parent/carer) 2. For support next to the student(s) which was not always feasible 3. For quiet and personal space for SwDs during the online course 4. Equipment supply and instructions 5. For psychosocial support 6. For a more interactive way of learning and adaptations for SwDs
4.1. Unmet needs	1. Technical difficulties 2. Lack of equipment 3. Lack of accessible material	1. Teachers practical training on digital tools 2. Technical difficulties 3. Lack of proper psychological support	1. Lack of proper psychosocial support 2. Need for therapeutic programs 3. Lack of access for some SwDS

According to stakeholders, the measures were delivered with delay due to the sudden outbreak of the pandemic and the lack of preparation. "There were a lot of online seminars and training programs for teachers during the pandemic, but the participation was optional and the content theoretical in many

cases" (Expert 5). "There were plenty of meetings and hours of telephone calls with parents or teachers in order to discuss issues or concerns but mainly to guide them for technical problems" (Expert 7). "There was a helpdesk that experts (e.g., teachers) could call and report a problem in order to find the right solution" (Expert 10). "Educational material was collected and available online for students and teachers" (Administrator 10). "The teachers organized the material and the activities or participated in the seminars at expense of their free time, and this in some cases caused burn-out and pressure" (Expert 4).

Table 6

Support Services for Students with Disabilities

Axes–Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
5. Support services for SwDs	1. Online meetings and telephone communication with Diagnostic Offices for instructions 2. Educational Material and information via e-me platform (https://auth.e-me.edu.gr) or schools' websites 3. Online psychological support 4. Technical Support mainly by Computer Science Teachers in schools	1. Psychosocial support of students/parents by psychologists and social workers in schools and from Diagnostic Services/Offices 2. Training by "PEKES," Ministry and Project Coordinators 3. Recruitment of additional staff 4. Regional Online schools 5. In the special schools, all services are available due to in person teaching and operation—Limited social skills programs 6. Educational material, instructions and information on IEP-Ministry websites (https://iep.edu.gr) 7. Technical support for teachers and parents. Basically by IT teachers in schools 8. Accessible educational material on the prosvasimo.iep.edu.gr website, educational TV programs, accessible textbooks 9. Legislation—Only instructions for COVID-19 measures. Lack of certain provisions for SwDs. Lack for personal data protection during online training	1. Regional online schools–second year 2. Equipment to students on the basis of economic criteria 3. Psychosocial support online or by telephone 4. Homework activities by email or uploaded to platforms (https://auth.e-me.edu.gr) 5. Parent updates (online or via email) 6. Students could go to school and connect with the help of the teacher 7. Meetings and telephone communication with parents/carers
5.1. Suspended services	1. Diagnostic services 2. Athletic activities 3. Social skills activities	Therapeutic programs (e.g., speech therapy, occupational therapy)	1. Therapeutic programs 2. Social interaction–social skills programs

Regarding the views of parents about the measures for SwDs, the results vary. There were parents that reported that "The measures were mainly delivered by the principal of the school and the teacher of the class, the special education teacher and the psychologist did not take many initiatives" (Parent 2). However, some parents underlined that "The teachers and school principals' efforts were very important and effective, encouraging my child to participate" (Parent 10). It is worth noting that all parents supported that "the presence of an adult during online education was necessary, and the situation was demanding and not without problems" (Parent 5).

There was consensus among the participants that the measures were limited, delivered with delay, and not centrally organized in many cases. Also, the majority of the participants agreed that there were no special measures or provision for SwDs and only general directions mainly about measures for the protection against COVID-19. There was no provision for the accessibility of the educational material during online/distance education. The measures were fragmentary and not organized in advance. The pandemic caught everyone by surprise and that had a profound impact on the education and especially the education of SwDs. The active participation of SwDs was limited. There was agreement between the stakeholders that "There was no financial support to schools and families and in some cases, students could not participate due to the lack of equipment and had to go to the school in order to participate in the online lesson or borrow equipment from the school" (Expert 1). However, experts, administrators and parents/carers supported that the situation was improved and more organized during the second year of the pandemic.

According to stakeholders, new needs regarding education and the education of SwDs emerged during, as well as after, the pandemic. The most important need that emerged according to stakeholders was to develop a systematic, organized preparedness plan for future crisis. Experts emphasized on the fact that "there was no preparation plan, we did not know how to deal with the situation, and we did not have the skills and/or equipment" (Expert 11). Parent 7 said that "We had to be present during online teaching and this was not possible." There were many unmet needs, especially due to "the lack of accessible material and systematic direction about teaching SwDs during the pandemic" (Expert 4). According to Expert 9 "Cases of domestic violence appeared, and we had to take immediate measures with collaboration with the Authorities". Expert 9 also reported "There were many cases that parents or other family members intervened in the online lesson making comments or even criticizing the way the teacher or the teaching process". In addition, the need for equipment, digital skills, interactive activities were mentioned by experts, administrators, as well as parents. When students returned to schools in person teachers and experts had to deal with new needs of the students, and especially the students with disabilities. Specifically, serious learning gaps appeared to students in regular schools who participated in online teaching for a large period of time as well as difficulty to adjust to in person teaching. Also, psycho-social difficulties appeared regarding SwDs after the pandemic such as anxiety, stress, social isolation, uncertainty, social difficulties or violent behaviors.

According to the stakeholders, there were some support services for SwDs and their families yet limited and not centrally or systematically organized. "The support services for our students were some online directions," and "the special education teacher made some individualized activities and organized separate online meetings with the child" (Parent 4). "The effort that was made by teachers and other professionals was important but not systematic, due to the unprecedented conditions and lack of preparedness" (Administrator 9). "We did our best, taking into account the situation and the problems with the lack of equipment, knowledge and skills" (Expert 11). Regarding the psychological domain, some psychologists were hired but not in every school, and their role was not so active according to experts and parents. A lot of activities and useful therapeutic programs were suspended during COVID-19. For example, occupational therapy, speech therapy, diagnostic services, athletic activities and social skills development programs were stopped due to the pandemic. "Due to the situation, we could not go to the

therapeutic programs, and our child was left behind especially regarding the social and psychological domain" (Parent 6).

Table 7
Challenges

Axes—Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
6. Challenges	1. Lack of centralized emergency instructions and crisis management protocol 2. Lack of digital skills and knowledge 3. Lack of equipment and infrastructure 4. Negative emotions (fear, uncertainty, anxiety–professional burnout) 5. Lack of specialized personnel 6. Parental intrusiveness 7. More demanding preparation of distance learning for teachers 8. Lack of social interaction and learning gaps 9. Reluctance and refusal of parents/teachers to participate in distance learning 10. Inaccessible educational materials and platforms	1. Lack of digital skills of students/parents/teachers 2. Technical problems, lack of equipment and infrastructure 3. Parental intrusiveness 4. Difficulties in cooperating with some parents and teachers due to negative attitudes towards distance education 5. Concern about the protection of personal data 6. Lack of distinction between working time and personal time (for teachers and managers) 7. Lack of the participation of students with disabilities in social skills 8. Inaccessible platforms 9. Lack of an organized framework and protocol and coordination 10. Exclusion of certain disabled students from the educational process 11. Lack of close communication and cooperation with the higher office/Ministry	1. Difficulties of SwDs at the psycho-social domain 2. Poor attendance of SwDs and lack of motivation 3. Increased cost to families for equipment 4. Technical problems 5. Learning gaps 6. Lack of knowledge and skills of students, and parents 7. Increased workload, and many home tasks 8. Gaps in the learning domain 9. Isolation and social difficulties 10. Lack of preparation programs 11. Negative effects on behavior (isolation, violence) and emotional difficulties (anxiety, uncertainty) 12. Initiatives by teacher/parents to meet the needs and solve the problems

All stakeholders agreed upon the manifestation of several challenges and difficulties due to technical problems, lack of professionals, equipment, skills, and accessible educational material. Parents, experts, and administrators argued that there was not a preparation protocol, and systematic directions and coordination about the teaching process, especially of SwDs. Administrators declared that there was no close collaboration between teachers and parents as well as schools with the 'higher' in rank Offices and/or the Ministry. All participants emphasized the serious technical problems, and the lack of technical

support in schools. Parents highlighted the psychosocial domain, and supported that "isolation and lack of social interaction in school settings caused serious problems to my child and of course there were serious learning gaps" (Parent 2). Similarly, experts were forced to face a lot of problems and difficulties during the pandemic, and especially during distance education. "The parents intervened in the process and that caused anxiety and frustration to teachers and other professionals" (Expert 10). They also reported cases of parents' reluctance to collaborate with the school and refused to follow the given by the Ministry directions. Also, the preparation of the teachers and/or other professionals was demanding during distance education at the expense of their free time, causing exhaustion and burn-out in many cases.

Regarding the recommendations, all stakeholders agreed on the need to develop and implement a preparedness protocol customized for educational organizations for future crisis. Also, the majority of stakeholders proposed the design of accessible educational material to be available to schools. Administrators reported many recommendations, and some agreed with the recommendations of parents and experts. Participants of all categories supported the need to increase the professionals' skills training in schools, as well as the provision of proper equipment. There were many experts that proposed "the creation of repositories for accessible and differentiated digital educational material" (Expert 6). Experts and administrators asked for measures to limit parental intrusiveness in distance education. Experts and parents proposed the opportunity for children with chronic diseases to participate online in the lessons (when it is necessary). Administrators underlined that "the training of teachers regarding the digital skills should be continuous and more practical about methods of distance learning and not so theoretical" (Administrator 3). Administrators supported that measures should be taken by the Ministry to promote the inclusion and active participation of SwDs in distance training.

As for the feedback, based on their experience, parents, experts and administrators supported that were not asked or offered the opportunity to give feedback and express their concerns and recommendations systematically. "We only gave some numbers in the 'my-school' platform but mainly for statistical

Table 8
Recommendations and Feedback

Axes–Sub-questions	Participants		
	Experts	Administrators	Parents/Carers
7. Recommendations	1. Hiring more professionals 2. Continuous training methods of distance learning process and differentiation 3. Provision of equipment, infrastructure 4. Creation of repositories for accessible and differentiated digital educational material 5. Limit the parents' intrusiveness and respect for the	1. Individualized interventions for SwDs 2. Training more practical and not theoretical 3. Continuous updating of teachers' knowledge on practical issues, but also methods of distance learning 4. Provision for equipment or infrastructure 5. Repositories for accessible and differentiated digital educational material 6. Measures to avoid intrusion of parents and to distinguish the personal	1. Hiring professionals (teachers, but also with psychologists, social workers) 2. Technical support and equipment for schools 3. Seminars, trainings, meetings to support both parents and teachers on the learning and the psycho-social 4. Create and implement a plan/preparation protocol 5. Systematic, continuous and detailed

	personal time of the teacher 6. Distance learning for students with serious chronic health problems 7. Centrally designed preparedness protocol/plan	time and working time of teachers/managers 7. Coordinated plan and protocol for preparation and action in crisis situations requiring online training 8. Hiring more staff (teachers, social workers, special support staff) but with more stability 9. Funding to schools for equipment and infrastructure to operate and technical support in remote conditions 10. Measures to ensure the protection of personal data on platforms 11. Introduction to undergraduate education of training courses on the use of ICT in Education and Special Education in both distance and in person conditions 12. Promoting the effective inclusion of more active participation of disabled students (e.g., co-instruction)	teacher training not only for familiarization with tools but also methodology 6. Designing the digital material to the needs
8. Feedback	1. No central coordination 2. Better collaboration between the closer hierarchy professionals 3. Better coordination during the second year 4. No feedback besides some numerical data 5. Preparedness plan for future crisis 6. Need for preparedness protocol	1. Positive view about the efforts of the teachers and experts, but no central support 2. The measures from the Ministry were limited and delivered with delay 3. The pandemic had negative effect on the psychosocial and cognitive domain of SwDs 4. Lack of feedback from schools to the Ministry 5. Preparedness plan for future crisis 6. Need for preparedness protocol	1. The parents expressed the needs to teachers and school principals 2. No central recording or collection of data– limited studies by individual researchers

purposes, such as the number of students with disabilities in the school" (Expert 8). "We expressed our concerns directly to the teacher or the principle" (Parent 6). "All of this experience taught us a lot, but there was no recording by the Ministry, in order to get more prepared for future crisis" (Administrator 4).

Conclusive Remarks

The present study shed light on designing and implementing a preparation protocol and guidelines to address effectively a future crisis. The data analysis revealed similar and diverging approaches among the key stakeholders (experts, administrators, and parents/carers) views on the applied strategies, measures and policies as well as concerning the surfaced challenges and proposed recommendations, such as the lack of central guidance and support, the need to develop and use an applicable preparedness plan for schools during crisis.

The study findings agree to a large extent with findings from literature and similar studies. For example, researchers worldwide support that teaching students with disabilities was challenging during the pandemic, and especially during distance education (Denisova et al., 2020; Mantzikos & Lappa, 2020).

Administrators, and parents agreed that individualized meetings between the student with disabilities and the special education teacher seemed more effective on the grounds that students with disabilities seemed to get more easily distracted when following education in the regular class, result also stated in different studies (Colombo & Santagati, 2022; Denisova et al., 2020). The special education teachers' role was more passive during distance education in the regular classroom. During the pandemic more attention was given to the socio-psychological domain and not so much to the cognitive/learning goals, leading to serious learning gaps. According to results from the current study, as well as other studies, students and especially SwDs were affected by social isolation and lack of interactivity during the pandemic (Dong et al., 2020).

The measures were delivered with delay, limited, in a sketchy way and not well-thought and centrally organized, and with no special provision for SwDs according to all stakeholders. Similar results are also mentioned in other studies and reports (Brennan, 2020; European Agency for Special Needs and Inclusive Education, 2022). The basic measures included training of teachers, online educational material, lending of equipment, meetings with parents and professionals. However, those measures according to parents were miscommunicated to them and their effectiveness was criticized. In addition, it is worth noting that many support services were suspended during the pandemic such as diagnostic services, athletic activities, social skills activities, and therapeutic programs to the detriment of students with disabilities in many European Countries (European Agency for Special Needs and Inclusive Education, 2021).

A consensus was observed from all participants regarding the challenges. However, by experts and parents pronounced more challenges than administrators. Most of the participants stressed out the lack of recording of the needs and of a preparedness protocol, directions, and appropriate coordination, especially for students with disabilities before the pandemic. The lack of preparedness protocol and guidelines to deal with distance teaching of SwDs during the pandemic is critical problem mentioned in many studies and reports (Alawajee & Almutairi, 2022; European Agency for Special Needs and Inclusive Education, 2021; Ndlovu, 2023).

As already stated, the stakeholders found a common locus in relation to the challenges they faced. These include the lack of preparation, equipment, skills, accessible and individualized material, and support services. There were cases of burn-out of teachers and/or other professionals during the pandemic, as shown by other studies as well (Cheptea et al., 2021; Papazis et al., 2023; Vargas Rubilar & Oros, 2021). The challenge of inaccessible platforms and educational material is also reported in many studies conducted worldwide (Jia & Santi, 2021; Porter et al., 2021).

It is worth noting that administrators had a more positive approach to the measures and their effectiveness during distance education. Many of the administrators underlined the number of measures and support

services that were implemented during the COVID-19 pandemic. This approach contradicted the experts' and the parents' views on the grounds that the measures were limited and not effective, and were delivered with delay. There was a discrepancy between the higher ranked professionals and the teachers regarding their views on the effectiveness, and adequacy of the measures, and coordination of education during the pandemic.

Almost all participants pointed out that the parents' role during distance education was crucial, result that corroborates with literature (Dong & Cao, 2020; Shaw & Shaw, 2023). According to administrators, teachers (special and regular class teachers) are not used to working collaboratively, and the educational system itself does not promote this kind of collaboration and the culture of co-teaching. Parents gave more emphasis on the deficiencies of the provided education to their children and on schools' difficulties to deal with and accommodate the needs of students with disabilities during the COVID-19 pandemic.

To conclude with, administrators presented more positive views regarding the effort and the measures implemented against the lack of preparedness and the unprecedented conditions. Stakeholders expressed a higher level of confidence in terms of preparedness in dealing with similar crisis in the future, due to experience obtained during the pandemic. However, all stakeholders acknowledged that it is crucial to design and implement a preparedness protocol for educational organizations for future crisis to secure the proper and equal access to education for all students, including the students with disabilities.

References

Alawajee, O. A., & Almutairi, H. A. (2022). Level of readiness for in-class teaching among teachers of students with special educational needs: Post-COVID-19. *Eurasian Journal of Educational Research (EJER)*, *98*, 1–20.

Armitage, R., & Nellums, L. B. (2020). The COVID-19 response must be disability inclusive. *Lancet Public Health, 5*(5), Article e257. https://doi.org/10.1016/S2468-2667(20)30076-1

Ayda, N. K., Bastas, M., Altınay, F., Altinay, Z., & Dagli, G. (2020). Distance education for students with special needs in primary schools in the period of COVID-19 epidemic. *Propósitos y representaciones*, *8*(3), Article e587. http://dx.doi.org/10.20511/pyr2020.v8n3.587

Brennan, C. S. (2020). *Disability rights during the pandemic: A global report on findings of the COVID-19.* COVID-19 Disability Rights Monitor 2020. http://dx.doi.org/10.13140/RG.2.2.10978.76486

Cheptea, D., Russu-Deleu, R., Meşina, V., Friptuleac, G., & Cebanu, S. (2021). Assessment of burnout among teachers during the COVID-19 pandemic. *Archives of the Balkan Medical Union*, *56*(2), 179–184. http://dx.doi.org/10.31688/ABMU.2021.56.2.06

Colombo, M., & Santagati, M. (2022). The inclusion of students with disabilities: Challenges for Italian teachers during the Covid-19 pandemic. *Social Inclusion*, *10*(2), 195–205. https://doi.org/10.17645/si.v10i2.5035

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson.

Denisova, O. A., Lekhanova, O. L., & Gudina, T. V. (2020). Problems of distance learning for students with disabilities in a pandemic. In *SHS web of conferences* (Vol. 87, Article 00044). EDP Sciences. https://doi.org/10.1051/shsconf/20208700044

Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, *118*, Article 105440. https://doi.org/10.1016/j.childyouth.2020.105440

European Agency for Special Needs and Inclusive Education (2021). *The impact of COVID-19 on inclusive education at the European level: Literature review*. (C. Popescu, ed.). Denmark.

European Agency for Special Needs and Inclusive Education (2022). *Inclusive education and the pandemic—Aiming for resilience: Key European measures and practices in 2021 publications*. (L. Muik, M. Presmanes Andrés and M. Bilgeri, eds.). Denmark.

Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications*. Pearson.

Guterres, A. (2021). *An evidence-based quest to protect human health*. The Independent Panel for Pandemic Preparedness and Response. https://theindependentpanel.org

Jia, L., & Santi, M. (2021). Inclusive education for students with disabilities in the global COVID-19 outbreak emergency: Some facts and thoughts from China. *Disability & Society*, *36*(7), 1186–1191. https://doi.org/10.1080/09687599.2021.1925226

Kim, J. Y., & Fienup, D. M. (2022). Increasing access to online learning for students with disabilities during the COVID-19 pandemic. *The Journal of Special Education*, *55*(4), 213–221. https://doi.org/10.1177/0022466921998067

Korkmaz, G., & Toraman, Ç. (2020). Are we ready for the post-COVID-19 educational practice? An investigation into what educators think as to online learning. *International Journal of Technology in Education and Science*, *4*(4), 293–309. https://doi.org/10.46328/ijtes.v4i4.110

Madaus, J. W., Gelbar, N., Faggella-Luby, M., & Dukes III, L. L. (2021). Experiences of students with disabilities during the COVID-19 interruption of in-person instruction. *Journal of Postsecondary Education and Disability*, *34*(1), 5–18.

Mantzikos, C. N., & Lappa, C. S. (2020). Difficulties and barriers in the education of deaf and hard of hearing individuals in the Era of COVID-19: The case of Greece—A viewpoint article. *Online Submission*, *6*(3), 75–95. http://dx.doi.org/10.46827/ejse.v6i3.3357

Mayring, P. (2004). Qualitative content analysis. *A companion to qualitative research*, *1*(2), 159–176.

Meda, L., & Chitiyo, J. (Eds.). (2022). *Inclusive pedagogical practices amidst a global pandemic: Issues and perspectives around the globe* (Vol. 7). Springer Nature. https://doi.org/10.1007/978-3-031-10642-2

Mohammed Ali, A. (2021). E-learning for students with disabilities during COVID-19: Faculty attitude and perception. *SAGE Open*, *11*(4). https://doi.org/10.1177/21582440211054494

Morando-Rhim, L., & Ekin, S. (2021). How has the pandemic affected students with disabilities? A review of the evidence to date. *Center on Reinventing Public Education*. https://eric.ed.gov/?id=ED615189

Ndlovu, S. (2023). Preparedness and response to COVID-19 disruptions and learning challenges for students with disabilities in South Africa: A systematic review. *Sustainability*, *15*(2), Article 1420. https://doi.org/10.3390/su15021420

Novianti, R., & Garzia, M. (2020). Parental engagement in children's online learning during COVID 19 pandemic. *Journal of Teaching and Learning in Elementary Education (Jtlee)*, *3*(2), 117–131. http://dx.doi.org/10.33578/jtlee.v3i2.7845

Papazis, F., Avramidis, E., & Bacopoulou, F. (2023). Greek teachers' resilience levels during the COVID-19 pandemic lockdown and its association with attitudes towards emergency remote teaching and

perceived stress. *Psychology in the Schools*, *60*(5), 1459–1476. https://doi.org/10.1002%2Fpits.22709

Porter, S. G., Greene, K., & Esposito, M. K. (2021). Access and inclusion of students with disabilities in virtual learning environments: Implications for post-pandemic teaching. *International Journal of Multicultural Education*, *23*(3), 43–61. https://doi.org/10.18251/ijme.v23i3.3011

Sari, D. K., & Maningtyas, R. T. (2020). Parents' involvement in distance learning during the COVID-19 pandemic. *Proceedings of 2nd Early childhood and primary childhood education (ECPE 2020)* (pp. 94–97). Atlantis Press. https://doi.org/10.2991/assehr.k.201112.018

Shaw, P. A., & Shaw, A. (2023). COVID-19 and remote learning: Experiences of parents supporting children with special needs and disability during the pandemic. *Education 3-13*, *51*(3), 371–385. https://doi.org/10.1080/03004279.2021.1960579

Smith, C. (2020). Challenges and opportunities for teaching students with disabilities during the COVID-19 pandemic. *International Journal of Multidisciplinary Perspectives in Higher Education*, *5*(1), 167–173. https://doi.org/10.32674/jimphe.v5i1.2619

Supratiwi, M., Yusuf, M., & Anggarani, F. K. (2021). Mapping the challenges in distance learning for students with disabilities during COVID-19 pandemic: Survey of special education teachers. *International Journal of Pedagogy and Teacher Education*, *5*(1), 11–18. http://dx.doi.org/10.20961/ijpte.v5i1.45970

Toquero, C. M. D. (2020). Inclusion of people with disabilities amid COVID-19: Laws, interventions, recommendations. *Multidisciplinary Journal of Educational Research*, *10*(2), 158–177. http://dx.doi.org/10.17583/remie.2020.5877

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2022). *COVID-19 recovery. Education: From school closure to recovery*. https://www.unesco.org/en/COVID-19/education-response

Vargas Rubilar, N., & Oros, L. B. (2021). Stress and burnout in teachers during times of pandemic. *Frontiers in Psychology*, *12*, Article 756007. https://doi.org/10.3389/fpsyg.2021.756007

World Health Organization (WHO). (2020). *Coronavirus disease 2019 (COVID-19) situation report-69*. https://www.who.int/docs/default-source/coronavirus/situation-reports/20200329-sitrep-69-COVID-19.pdf?sfvrsn=8d6620fa_2