Distance learning from a student perspective

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Introduction

The Covid-19 pandemic has profoundly affected the lives of primary and secondary school students across Europe. During the first quarter of 2020, it was decided that most of the student population in many EU Member States should stay at home to avoid contagion. This meant that many schools were closed, and teaching moved online. In all cases, a fairly extensive transition period was implemented, during which schools adapted to the new situation and generated responses to ensure that their students did not 'lose' the academic year. The novelty of the situation, and the lack of previous reference points, made it necessary to design and adopting *ad hoc* strategies and actions, with teachers putting tremendous efforts into solving problems as they arose on a day-to-day basis. Families were also profoundly affected by the situation. In the case of families in which the adult members could continue to work remotely ('teleworking'), family life was affected by the need to combine family, work and school responsibilities. In the case of families in which some or all of the adult members lost their source of income because their jobs closed down, the uncertainty of lockdown was compounded by precariousness brought about by a lack of basic necessities.

This report presents the views of children and young people regarding their learning and well-being in the context of distance education. Data concerning how this situation has affected these individuals has been collected by compiling secondary sources including opinion surveys, case studies, exploratory studies and reviews (meta-data) published in reports and/or in scientific articles. Although information has been gathered from all Member States (EU-27), the findings presented in this study are based on results from 20 countries in particular (Belgium, Malta, Estonia, Ireland, Portugal, Romania, Greece, Italy, Austria, Denmark, Finland, Germany, Croatia, Poland, Lithuania, Spain, France, Sweden, the Netherlands and Luxembourg). This is not an exhaustive report; it contains only a sample of the studies carried out over the last year and a half. The information has been organised into three sections:

    (a) General sense of well-being during school closures;

    (b) Students' perceptions of schooling during Covid-19;

    (c) Students' perceptions of policy responses.

Each of these three aspects are discussed below.

General sense of well-being during school closures

School closures have affected children and young people across Europe both positively and negatively. Through the use of secondary sources, a clear distinction can be made between the effects on the mood of children and young people, as well as on their social relationships, and on their motivation. Table 1 Aspects highlighted by children and young people concerning their personal experiences during school closures summarises the main aspects on which information was gathered from secondary sources.

Table 1 Aspects highlighted by children and young people concerning their personal experiences during school closures

Highlighted aspects concerning personal experiences during school closures:

- Impact on mood;
- Relationships with friends;
- Impact on motivation;
- Impact on emotional stability and mental resilience;
- Effect of age on perceptions of well-being;
- Impact on physical health;
- Fears about the effects of Covid-19 on loved ones;
- Impact of the lockdown on students with special educational needs (SEN).

Impact on mood

Overall, home lockdown and school closures have been found to have an impact on the mood of children and young people. The nature of this impact depends not on the lockdown itself, but on how it was addressed by the people around the children (families, teachers, etc.). Data indicate that children felt bored, stressed or afraid in differing proportions, depending on the source. Children also felt engaged, happy, resilient, or connected when participating in evidence-based educational activities, or as a result of being part of resilient communities that implemented ways to maintain social contact while distancing.

For those children who did not have the opportunity to participate in evidence-based educational activities based on, the long period of confinement at home had a negative impact on their well-being. During this period, such children went without seeing people other than members of their household, losing contact with friends, not attending school, as well as other much harsher aspects, such as experiencing violent situations at home with no possibility of escape (including violence towards other members of the family as well as towards themselves). Various sources report that pessimistic feelings tended to be

more frequent among young people than among children. Reports of negative emotions increased with age, as the loss of social contact (friendships, etc.) was felt more strongly by older children. In contrast, younger children reported being happy to spend more time with their families. In Malta, Cefai, Skrzypiec and Galea (2021) found that young children (up to 12 years old) expressed high subjective levels of well-being.

The lockdown also generated adverse effects such as changes in sleep patterns, food and exercise, as well as increased feelings of loneliness, irritability, anxiety, etc. Kalverboer, Jong and Hopman (2020) indicate that 50% of children who participated in their survey suggested that the pandemic had negatively affected their mood. Analysis of children's calls to the *Kindertelefoon*, a helpline for children in the Netherlands, reported a 20% increase in conversations about mental health, fears, nightmares, self-harm and eating disorders. Since May 2020, a nationwide study has been carried out in Finland to examine the effect of Covid-19 on the educational situations of primary and secondary school students, as well as their well-being and that of their families. In the survey, children were asked about their experience of loneliness, both during the lockdown in spring 2020 and after returning to school in the autumn. Approximately 60% of girls said they had felt lonely while schools were locked down. By May 2020, that proportion had decreased to 45%. Among boys, this figure fell from 40% in spring to 23% in May. In the autumn, when the study was conducted again, the proportions of boys and girls who reported feeling lonely remained roughly the same (60% of girls felt lonely, compared with 38% of boys). In Belgium, a review of studies was carried out between 1 February and 19 August 2020 by Unia (2020), an independent public institution that fights discrimination and promotes equal opportunities. The review, entitled *Covid-19: A test of Human Rights,* reported that four out of 10 children felt bored. Sixty per cent of children said they were concerned about their parents, 44% said they felt afraid, and 38% reported being sad. In Estonia, Stoecklin, Gervais and Heite (2021) also reported that children felt bored (e.g. '*I cannot visit my grandparents and cannot play football with my grandma'* – nine-year-old girl, Estonia). In Ireland, school closures had a negative effect on 63.3% of students, compared with only 3.7% who reported a positive feeling, while 33% reported feeling unsure (Burke and Dempsey, 2020). Similar feelings were reported in France by Bourion-Bédès et al. (2021), and in Poland (Bojanowska et al., 2020). In Luxembourg, children reported a significant decrease in well-being. While 96% said they felt at ease before the pandemic, 67% stated that their life was now worse during lockdown. These results are consistent with those obtained in a systematic review of 63 studies involving 51,576 participants, carried out by Loades et al. (2020). This found a clear association between loneliness and mental health

problems in children and adolescents. Loneliness was associated with future mental health problems up to nine years later. The strongest association was with depression. These findings were consistent across studies involving children, adolescents and young adults. Cefai, Skrzypiec and Galea, in a study on the resilience of Maltese children during Covid-19, found that young people aged 11-19 years felt lonely during the pandemic. They experienced fear and a decrease in hope. At the same time, however, they highlighted quality time spent with their families and the feeling of comfort and safety of home. Another study conducted by the University of Antwerp (Keki, 2020), involving a sample of 4,600 children, found that four out of 10 children between 6 and 12 years stated that they felt bored and missed their friends. However, these children also highlighted the positive aspects of lockdown: staying up longer in the evening, sleeping longer in the morning and having to rush less were the advantages most frequently mentioned.

Another aspect affecting children's perceptions of their well-being are the material conditions in which they live. A study conducted in Belgium by the Lokeren Youth Council (2020), involving a sample of 2,045 young people, showed that more than 15% of the young people surveyed reported not having their own space at home to relax. One in 10 of the young people who responded said they did not have anyone to talk to about their feelings.

The results also showed that one in 10 young people had experienced violence with an adult, and that 5% of young people were the victims of bullying. Limited discussion has taken place regarding physical and sexual violence, due to the seriousness of these issues and the difficulty of being able to identify and report cases.

The impact of Covid-19 lockdowns has been different among children and young people who have participated in digital spaces created on the basis of evidence-based criteria. In the Netherlands, Joosten et al. (2020) report that many children have shown tremendous resilience, with positive effects on their emotional stability during the pandemic. Similarly, Branquinho et al. (2020) found that children in Portugal reported feeling happier because they had more time to engage in pleasurable activities, and felt more relaxed. In Spain, Álvarez-Guerrero et al. (2021) report similar instances of children successfully navigating the challenges posed by the lockdown of schools. Children and young people felt resilient. In another Spanish study, Roca et al. (2020) discuss ways to prevent child abuse during confinement, implementing educational actions based on research evidence. Also in Spain, still-unpublished data reveal that children whose families participated in school as volunteers (learning communities) tended to feel happier and more resilient. The commitment of these families to the education of their children was a factor in the positive

feelings felt by such children and young people. In another study, Elboj-Saso et al. (2020) report that digital spaces for children to connect and share with their peers, supported by their teachers and families, was another strategy that has been successful in ameliorating the negative effects of the lockdown on children.

Relationships with friends

Another aspect of children's lives that has been affected by school closures and lockdowns at home is their friendships. In most countries in which studies have been conducted, children report missing their friends and even fear losing them due to social distancing. Conversely, other children report having used technology to maintain and/or increase social contact with their friends via networks. In Spain, Roca et al. (2020) report the creation of online Dialogic Workspaces (DW) known as 'open doors', which brought together classmates and teachers. These online spaces helped to maintain a 'connection between classmates', with teachers ensuring the quality of the interactions between children, who continued to learn together with their friends. One participant in the study reported:

> 'The online dialogic workspaces are a moment of connection between classmates in which other people participate; the teacher maintains quality interactions that allow them to continue learning together with their friends, having a dialogic space that gives purpose, motivates and cheers them up.' (Roca et al., 2020).

Conversely, negative emotions are reported in situations where schools did not engage in deliberate actions to maintain connections between children. Nikolaou (2020) state that students in Greece missed their friends and the social relationships they have with them, and used technology to maintain these social relationships. One participant in the study claimed:

> '[...] well, that there are both Facebook and Instagram and so we could send a message... of course, it does not compare... how long can you sit at the computer? We also had parents constantly shouting about using the computer [...]. "We also lost contact with the teachers [...]. Fortunately, I also went to a tutoring centre and so when we were excluded, we did a video conference.... but it was not the same.' (Nikolaou, 2020).

The main aspect highlighted by children in Ireland was their concern about missing their friends, teachers and school (Dempsey and Burke, 2020). This was also the case in Belgium (Unia, 2020; Corona Survey by the University of Antwerp (Keki, 2020) and Estonia (Stoecklin, Gervais, Kutsar and Heite, 2021). In Portugal, Branquinho, Kelly, Arevalo,

Santos and Gaspar (2020) report an increase in family conflicts and disagreements, as well as a perceived reduction in the significance of important life moments. At the same time, the study found that the lockdown provided opportunities for a wider variety of friendships.

In relation to coping strategies, Branquinho et al. (2020) highlighted the importance of facing the pandemic from a positive perspective: Portuguese children reported engaging in pleasurable activities, as well as keeping in touch with family and friends. In Spain, Álvarez-Guerrero et al. (2021) reported the cases of students with special education needs (SEN) participating in online literary dialogic gatherings (as a regular activity conducted by their school), who maintained their relationships and reinforced friendships even during the school lockdown.

Impact on motivation

The home lockdown has also had consequences in terms of children's motivation towards school and academic activities. Some studies have reported negative effects on children's motivation. Others have highlighted the role of teachers' efforts to continue their teaching activities online, in engaging children and maintaining their motivation.

In some cases, a subjective feeling of disconnection from school has been used by some students as an excuse to justify a sense of anomie towards school and academic practices. In a study of 13,000 students conducted in Austria, Schober, Lüftenegger, and Spiel (2020) noted that high-school students were concerned about excessive demands from school, and felt insecure about meeting all of their schools' requests. These authors concluded that the older the student, the greater their negative feelings towards distance schooling, because they felt more pressure to perform, as well as stress from spending too many hours in front of a computer. In Romania, Nadolu (2020) report that social isolation significantly impacted students' lives. In Denmark, Wistoft, Qvortrup, Qvortrup and Christensen (2021) reported difficulties among young students: the lockdown situation and the closure of schools challenged their sense of well-being and mental health. Almost 20% of students surveyed reported feeling 'lost' at home. In Finland, Niemi and Kousa (2020) report that students[1] complained of heavy workload and fatigue, and conclude that this contributed to some of them losing motivation for schoolwork. However, in another Finnish study, Ilomäki and Lakkala (2020) report the opposite conclusion: in this case, the

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[1] The study population covered students between 16 and 18 years old.

students[2] interviewed stated that they were satisfied with the content and organisation of their course.

The results of a study conducted in Ireland by Mohan, McCoy, Carroll, Mihut, Lyons and Mac Domhnaill (2020) highlight another important aspect relating to motivation: its effect on students' ability to organise their work at home. Children who were highly intrinsically motivated tended to show more proactive attitudes towards self-regulating their work at home. Meanwhile, those children whose motivation depended on extrinsic elements were found to have lost motivation because those extrinsic aspects (such as having a teacher to encourage them or peers to collaborate with) were not present at home.

In other cases, technological platforms positively affected children's motivation, for a number of reasons (novelty, interest in the use of technology, etc.). This is one of the main findings of a study conducted in Italy by Mascheroni, Saeed, Valenza, Cino, Dreesen, Zaffaroni, and Kardefelt-Winther (2021). According to their data, 57-64% of students who participated in the study reported feeling highly motivated to participate in online activities. In Austria, a study by Vuorikari, Velicu, Chaudron, Cachia and Di Gioia (2020) reports that children developed positive attitudes towards online learning activities.

These data therefore suggest that the impact of the lockdown on motivation largely depended on how schools organised teaching via online platforms, as well as how families engaged with the situation. For instance, Trültzsch-Wijnen and Trültzsch-Wijnen (2020) reported that in Austria, children remembered their interactions through digital platforms during lockdown positively. This is consistent with the results obtained in a more extensive study involving families from Austria, France, Germany, Ireland, Italy, Portugal, Romania, Slovenia and Spain (Vuorikari et al., 2020). Many children also gained the impression that they had improved their digital skills during lockdown. In Spain, Elboj-Saso et al. (2021) report the cases of children who participated in online educational activities organised by their schools, and which also involved their families. These children maintained their social relationships with friends and peers, and their motivation was impacted positively.

Impact on emotional stability and mental resilience

Another aspect affecting children's perceptions of their well-being are the material conditions in which they live: a study conducted in Belgium by the Lokeren Youth Council (2020), involving a sample of 2,045 young people, showed that more than 15% of the

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[2] The study population covered students aged 16-19 years. The most prominent difference between this study and that of Niemi and Kousa (2020) is that this study included students from small schools in rural areas.

young people surveyed declared that they did not have their own space at home in which to relax. One in 10 young people in the study reported having no one to talk to about their feelings. The results also showed that one in 10 young people had experienced violence from an adult; 5% of young people were the victims of bullying. Limited discussions have taken place regarding physical and sexual violence due to the seriousness of these issues, and the difficulty of being able to identify and report cases.

Impact on physical health

Some studies reviewed for this report indicate that pandemic-related lockdowns may also have affected children's physical health. In Croatia, Dragun et al. (2021) report weight loss during lockdown in 30%-40% of secondary school students (17 years old on average), while around 20% of the students observed showed weight gain. In Estonia, Stoecklin, Gervais, Kutsar and Heite (2021) found a worsening of children's physical health due to decreased physical activity during lockdown. Joosten et al. (2020) observed that a group of 189 children in the Netherlands engaged in an average of one less hour of physical movement each day, as well as sitting down for 45 minutes longer than usual. In the same study, Joosten et al. (2020) reported that one in five children had gained weight, and that 40% of children[3] were overweight or obese. Merfeldaitė, Prakapas, and Railienė (2021) report similar results in Lithuania.

Fear about the effects of Covid-19 on loved ones

During the pandemic, millions of people across Europe have contracted Covid-19. Many have fallen ill, potentially developing severe or very severe symptoms and even dying from the disease. Children and young people are well aware of the terrible consequences of Covid-19, and express concern and fear about their family members becoming infected. Such concerns have had an impact on their emotional well-being. In our review of studies, we identified only one survey in which these concerns were made explicit. In Belgium, Unia (2020) reported that children declared they were concerned about their parents (60%) and felt afraid (44%) and sad (38%).

Impact of the lockdown on students with special educational needs (SEN)

The impact of lockdown on Europe's population has been even more profound among people with special educational needs (SEN). A lack of diverse social interactions has had

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[3] Age is not specified.

a negative impact on the emotional well-being of these children and young people. Having to stay at home has meant being unable to receive treatment, being unable to attend specialist centres, and not receiving support from professionals. This has had a negative impact, both on people with SEN themselves (including children and young people with SEN), as well as on their families, who have had to take on very specialised types of care for which they are unprepared. Mohan et al. (2020) highlight that among children with SEN and low-income families, the lockdown has had a negative impact on mental health and well-being.

Interestingly, in Spain, children from poor neighbourhoods with SEN had a very positive experience because their schools created a safe online environment based on the implementation of successful educational activities (Álvarez-Guerrero, et al., 2021). As a result, they did not report feeling alone. This is an example of the positive impact of implementing actions based on scientific evidence to overcome the potentially negative effects of the school lockdown due to the pandemic. This study confirms the importance of social interaction, social relationships and coordination between schools and families as crucial aspects enabling children with SEN to cope successfully with the challenges of the Covid-19 lockdown.

Student perceptions of schooling during Covid-19

During the first quarter of 2020, many countries across Europe decided to close schools and confine people to their homes in order to address the global Covid-19 emergency. There is already evidence of the impact this decision had on families and teachers. Here, we present the perceptions of primary and secondary school students in relation to this exceptional situation. The main areas covered by these findings are listed in Table 2 Changes in some aspects of schooling during the pandemic highlighted by students.

Table 2 Changes in some aspects of schooling during the pandemic highlighted by students

Changes, which were highlighted by students, are related to: • The joy of learning;   • Organisation of study time;   • Relationships with teachers;   • Impact on students' academic trajectory;   • Perceptions of the increased use of technology as an educational medium;   • Impact of school closures on the most vulnerable groups;   • Families as resources.

Impact on the joy of learning

For many children and young people, going to school is associated with the joy of learning. Learning brings satisfaction, creates excitement, and is part of the lives of children and young people. This is why the closure of schools during the first quarter of 2020 due to the pandemic had consequences for children and young people's perceptions of learning. On the basis of the studies analysed, we highlight that the ways in which schools were able to organise their academic activities contributed more or less to maintaining this feeling of the joy of learning, or did not contribute at all.

In Austria, Schober, Lüftenegger and Spiel (2020) report the cases of students who expressed a decrease in their enjoyment of learning due to an increased pressure to perform, as well as stress from spending too many hours in front of a computer. A similar situation was reported in Croatia by Causevic (2020). Students reported dissatisfaction with online teaching, because they found online learning burdensome and stressful due to the large number of tasks they had to complete on a daily basis. Letzel, Pozas and Schneider (2020) reported a similar situation in Germany, where in addition, students also said that their tasks were sometimes challenging. Students said they felt overwhelmed by the large number of homeschooling tasks. In Spain, Álvarez-Guerrero et al. (2020) highlight the cases of students with special educational needs (SEN) who declaring that they were happy to continue lessons at home (for example, '*because I am at home with my mum*'), and that parents supported them with their schoolwork. Lessons were designed to involve both children and families; thus, creating opportunities for families to engage in school activities with their children was a crucial aspect of maintaining their enjoyment of learning.

In addition, factors external to the school affected the feeling of the joy of learning. In cases where students reported having obstacles that made it difficult for them to follow lessons, these difficulties contributed to diminishing their feeling of joy about learning. Examples include not having access to a computer; an inadequate Internet connection (or no connection at all); not having their own space in which to connect; having to share the computer with other family members; having a sick family member, etc.).

Organisation of study time

One of the most visible impacts of school closures has been on the organisation of study time. When children attend school, teachers are the ones who set the pace of learning in their classes through the design of teaching units. Classroom contact facilitates this organisation and monitoring. However, when children are at home, the organisation and

monitoring of homework can present some difficulties. In studies focusing on teachers or families, a number of teachers and parents report that lockdown has affected children's homework. Surveys have also asked children how they organised their homework during the pandemic, when schools were closed. Some children reported that the experience of being housebound had helped them learn to self-regulate. In Austria, Vuorikari, Velicu, Chaudron, Cachia and Di Gioia (2020) looked at how remote schooling was handled by families. The children they interviewed reported that they had learned to better self-regulate. Schober, Lüftenegger and Siel (2020) collected the testimonies of students who were worried about the increase in homework, which made it very difficult for them to complete it all, leading to an increase in their anger at schoolwork. A similar situation was found in Finland: Niemi and Kousa (2020) report that students who participated in their study reported feeling overwhelmed by homework. This led to some of them losing motivation for schoolwork. According to a study by Mascheroni, Saeed, Valenza, Cino, Dreesen, Zaffaroni and Kardefelt-Winther (2021), the same was true in Italy. In Germany, Letzel, Pozas, and Schneider (2020) state that most students who participated in their study reported that they spent far less time on school-related topics during homeschooling, compared with face-to-face classes at school. In another study on the situation in Germany, Huber and Helm (2020) found that students who self-regulated their planning reported an increase in the time they dedicated to school matters (31% dedicated 25 hours a week or more). Meanwhile students who treated lockdown as a kind of holiday reported a low level of learning at home (2 hours or less per day). The results of the study by Mohan, McCoy, Carroll, Mihut, Lyons and Mac Domhnaill (2020) show that self-regulation also depends on an individual student's motivation: if there is intrinsic motivation, this makes it easier for these children to self-regulate and organise their schoolwork than if their motivation depends on elements extrinsic to them.

Relationships with teachers

During the school closures, teachers in European schools had to find innovative ways to maintain contact with their students. Several studies report that this required a great deal of effort on the part of teachers, in terms of both time and dedication. This included learning as they went along how to use technologies that were often new to them, while at the same time also teaching their students how to use them. Perceptions regarding contact with teachers appear in the testimonies of students. For them, being able to communicate with the teacher, not losing contact, and addressing doubts played a decisive role in helping them to follow the curriculum while schools were closed. In Spain, Roca et al. (2020) report the case of the dialogic workspaces (DW) known as 'open doors'. Teachers used social

networks as channels to communicate with their students. Students' reactions highlight the impact that this action had:

> *'We are connected! If you need anything, we can help you!'; 'Are you overwhelmed by the situation? Do you need us to help you out? What is worrying you? We are here ♡'; 'Friendships are our lighthouse in this journey'; '#Wearenotalone'; '#ConnectedFromHome'; 'Friendships are similar to the stars, they shine brighter in the dark'; 'Love is strong and brave'; '#ConfinementWithLove'; and 'Can we help one person every day with a sign of love? Are you in?'* (Roca et al., 2020).

However, in situations where there was no regular contact with the teacher, students reported feeling lost and disorientated. In Denmark, Wistoft, Qvortrup, Qvortrup, and Christensen (2021) note that students who participated in their survey reported feeling 'lost' at home because they didn't feel acknowledged by their teachers. In Greece, Nikolau (2020) also found evidence of a loss of communication between students and teachers. In Ireland (Dempsey and Burke, 2020), some students expressed concerns about missing their teacher and school.

In Finland, students reported that they were very satisfied with the organisation of academic content and how able they were to follow lessons from home (Ilomäki and Lakkala, 2020). Good organisation on the part of the teacher was crucial to this. Unlike Finland, secondary school students in Poland, complained of difficulties in following lessons due to a lack of organisation of distance learning (Korzycka et al., 2021).

For students, the situation was as challenging as it was for teachers. In Lithuania, Merfeldaitė, Prakapas and Railienė (2021) found that students and teachers often learned from each other. Some students reported instances in which they helped teachers with technological aspects of the platforms they were using to communicate. In Germany, Letzel, Pozas and Schneider (2020) provided data on students who reported that they would like more support from teachers.

Impact on academic trajectories

One of the biggest concerns among students (especially those at secondary school) is the impact that school closures may have had on their academic trajectories. Many students reported fearing that the closure of schools would mean a loss of educational content for them, and that they would not pass the placement exams between academic cycles. In Austria, Vuorikari, Velicu, Chaudron, Cachia and Di Gioia, (2020) found that between 20% and 32% of students were worried about getting poor grades due to the use of online learning activities. In Ireland, Dempsey and Burke, (2020) reported that some students

were afraid of missing out on crucial learning topics and having to stay back in school. This feeling was especially strong among students in 'transitional' stages such as the sixth grade, who reported feeling afraid of missing out on graduation because they would not cover all of the content they needed to.

The closure of schools also had consequences for academic practices: for example, Irish students reported experiencing a negative impact on their ability to engage with group work and practical work because of the difficulty of working in groups via their computers (Mohan et al., 2020).

Perceptions of the increased use of technology as an educational medium

In all Member States (EU-27), schools pursued a strategy during the closure due to the pandemic of using technologies and technological platforms to continue working academically with students who were confined to their homes. Evidence is well known regarding the socio-economic inequalities that result from limited access to these technologies among the most vulnerable sectors of the population, whose children have found it much more challenging to continue with schooling during the school closures. Public administrations in various Member States have implemented support programmes aimed at families with fewer resources, providing aid to facilitate access to computers and/or the Internet. In addition, schools have looked for ways to distribute resources in order to reach the most vulnerable families, drawing on community networking within neighbourhoods.

These inequalities are also reflected in the opinions and testimonies of children and young people. Distinctions can be made between those who encountered no problems in connecting to school using a computer and high-speed internet connection, and those who did not have access to such technologies. In Croatia, Causevic (2020) reports that some students said they lacked the necessary technology required to access online teaching from home. In Lithuania, difficulties in organising distance learning primarily resulted from students not having a suitable learning environment (Merfeldaitė, Prakapas and Railienė, 2021). In France, a study led by Aubert et al. (2020) fund that 2% of students did not have access to the internet at home, and that 49% of children had to share their room and computer with siblings. Similar conditions were also found in Greece (Nikolau, 2020). Even among those students who did have access to the necessary technologies, the multiplicity of platforms used to connect to school made it difficult for them to follow classes normally. In Austria, Schober, Lüftenegger, and Spiel (2021) reported that many students complained of having to use a variety of different platforms (most schools – 80% – used up to two different platforms). In Poland, technical difficulties and insufficient skills in using

software were the problems most frequently mentioned by students (Korzycka et al., 2021). In Italy, Mascheroni et al. (2021) stated that older students found it easiest to learn how to use these new learning environments. Younger children reported the most significant difficulties in learning how to use them. Access to technology may also explain differences in academic results. Montenegro, Raya and Navaridas (2020) explain that students in Spain who had access to technology obtained better grades than those who had neither a computer nor a high-speed broadband Internet connection. Access to such facilities is directly related to the socio-economic position of students' families.

Meanwhile, the use of technology has also exposed children to cyberbullying. In Belgium, evidence has been found of cases of bullying via the internet. Such cases can be very difficult to detect and report.

In Spain, Roca et al. (2020) report that evidence-based actions have had a positive impact in overcoming violence and abuse towards children during the lockdown. Children reported feeling safer, and their participation in 'open doors' dialogic workspaces (DW) prevented them from being bullied or harassed via the social networks. As one teacher said:

> '*Something happened to us today in fourth-grade primary. A girl that usually annoys another (boy) in the class eliminated him from the videoconference. The rest responded immediately, and I was able to intervene.*' (Roca et al., 2020).

Impact of school closures on the most vulnerable groups

It should firstly be noted that children from vulnerable groups (migrants, children from families with low socio-economic status (SES), children not living at home, children without parents, etc.) are more difficult to reach; thus, they often remain excluded from surveys. Ample evidence is already available that lockdowns and emergency-driven restrictions to cope with the Covid-19 pandemic have exacerbated social inequalities across Europe. In addition, children and young people have spoken out about such inequalities through their testimonies. We have already noted the inequalities that exist in terms of access to technologies, and the apparent effect these have on the schooling and academic results of primary and secondary school students. Insufficient or inadequate access to technology is also reported as affecting students' ability to follow school programmes. In Germany, Dietrich, Patzina and Lerche (2021) noted pronounced differences in home schooling efforts, according to social background. Families with more resources can devote more time to their children's education at home, while in households with fewer resources, or where there are concerns about having enough resources to survive, home schooling is affected. Doyle (2020) reports similar findings in Ireland.

But the effects of school closures on the most vulnerable groups do not end there. Children from ethnic minorities or migrant families have faced discrimination in dealing with the situation created by the pandemic and with school lockdowns. In Belgium, in the review of studies conducted by Unia (2020), the testimonies of immigrant children revealed situations of discrimination that affected them emotionally (e.g. when schools began to open, they were only allowed to return after being tested for Covid-19, while the rest of their peers could go back to the school without being tested). Unia's (2020) review concludes that the inequalities created by school closures threatened children's right to education. Not all children had space to do their schoolwork. In particular, the studies reveal the impact of lockdowns on vulnerable groups such as Roma people. In Romania, a UNICEF Romania (2020) study warned that children who do not speak Romanian found it more challenging to access the content of online classes.

Children from families with low socio-economic status (SES) also experienced difficulties in addressing the effects of the pandemic on their schooling. A survey conducted by Uit De Marge (2020) in Belgium, involving a sample of 2,412 children and young people, found that some families found it impossible to put down a deposit of EUR 25 euros in order to gain access to a laptop loaned by the school. Many children declined to ask for a laptop at school in order not to be stigmatised for being poor. Other barriers detected included not having software such as Microsoft Office installed on home computers. Lastly, other variables such as geography have been found to be important in terms of inequalities: for example, Mohan et al. (2020) report that rural areas of Ireland have less technological infrastructure, which means that children in these areas encountered greater difficulties in accessing online classes. The same is true in Poland (Korzycka et al., 2021).

In contrast, certain efforts made by schools and the educational community (families, etc.) have had positive effects on the engagement of children from vulnerable groups. Álvarez-Guerrero et al. (2021) report the case of children with SEN who have participated in online dialogic literary gatherings (as a regular activity within their schools). These children reported that they enjoyed these lessons, felt connected with their peers and with teachers, and felt supported by their families (for example, when mothers helped them to participate in the gathering). The teachers involved also noticed the important effects on students' learning of working together in an inclusive digital environment. One teacher explained:

> 'Simply the attention, I have found it very important. I believe interaction has been super important, the attention, concentration towards the book, listening and the respect they had when waiting for the other ones to finish their intervention and

start speaking. Some of them even raised their hands. (…) They don't do that when we are in class [now they are online].' (Álvarez-Guerrero, et al., 2021).

In another (as yet unpublished) study carried out in Spain, children reported having good memories about the lockdown because they kept in touch with their peers through daily connections with the school. The routines of online classes and homework were also a point of reference for them to feel connected and not become bored.

Families as resources

Families became important actors during the school closures in Europe in the first quarter of last year. They had to cope under conditions that have been widely documented – turning the home into a workplace (where work was available), or alternatively facing unemployment and its economic consequences. In addition, families were faced with taking on certain educational tasks and combining them with the rest of their domestic activities and chores, etc.). For many people, especially women, the closure of schools meant a triple day: work, education and family life. Children and young people did not remain unaffected by this situation. For many, especially the younger children, the closure of schools and lockdowns at home meant spending more time with their parents, which they appreciated very much. In Malta, children (up to 12 years old) highlighted quality time with their families (Cefai, Skrzypiec and Galea, 2021). Others, unable to communicate with their teachers to resolve learning difficulties, turned to their parents, although this was not always successful. In a study carried out by Uit De marge (2020) in Belgium during Spring 2020, 61% of the 2,412 children and young people surveyed said they had no one at home to help them with their homework. 56.5% said there were priorities at home other than education (e.g. taking care of smaller siblings, helping parents to address their financial needs, etc.). In Denmark, Wistoft, K., Qvortrup, Qvortrup and Christensen (2021) reported that approximately 20% of the students who participated in their survey said they had no support at home from their parents in solving school-related questions. Letzel, Pozas and Schneider (2020) reported similar findings regarding students who said they would appreciate more support from their families. Finally, the studies also highlight that spending more time together at times generated family conflicts and disagreements. This is one of the aspects highlighted by students in Portugal (Branquinho et al., 2020) and in Sweden (Kapetanovic, Gurdal, Ander and Sorbring, 2021).

Student perceptions of policy responses

In our review of studies conducted, we found only one reference to students' perceptions of policy responses to the pandemic. This is the study carried out in Ireland by Burke and

Dempsey (2020), in which the students interviewed complained about the lack of policies to regulate distance learning. No further reference has been found to this issue.

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